

Appendix H

SWRP Project Forms



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	
Name of Primary Contact	
Mailing Address	
E-mail	
Phone (###)###-####	
Other Cooperating Agencies/Organizations	
Is your agency committed to the project through completion? If not, please explain	

II. General Project Information

Project Title	
Project Description (Briefly describe the project, in 300 words or less.)	

Project Location:	
Latitude:	
Longitude:	
Can you provide a map of the project location including boundaries upon request?	<input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	
County:	
City/Community:	
Watershed:	
Groundwater Basin:	
Planning Area:	
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	
Objective(s) that the Project will help accomplish:	

<p>Explanation of Project linkage to goals and objectives</p>	
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance - Delta	
Conveyance - Regional / local	
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage -- CALFED	
Surface Storage -- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water-dependent Recreation	
Watershed Management	
Improve Flood Management	
Flood Risk Management	

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre-feet of water supplied, acres of habitat restored)
Increase Water Supply			
Improve Water Quality			
Groundwater Improvements			
Water Conservation and Reuse	<input type="checkbox"/>		

Watershed Rehabilitation	<input type="checkbox"/>		
Habitat Improvements	<input type="checkbox"/>		
Flood Management	<input type="checkbox"/>		

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR
- Effectively resolve significant water-related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies
- Achieve long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re-establish river-floodplain hydrologic continuity, re-introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)		
2. Annual Operations and Maintenance (O&M)		
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.		
d. For capital projects, explain how operation and maintenance costs will be financed.		
e. Basis for project cost		
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual			
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is “no”, do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes No <input type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>

Project Information Form **SWRP Projects Addendum**

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- | | | | |
|---|-----|----|-----|
| a. Is the project located on lands with Public ownership? | Yes | No | N/A |
| b. Have easements and/or all required land use agreements been obtained or are pending? | Yes | No | N/A |

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.

Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.

Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff			
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume			
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			

TABLE 3. BENEFIT METRICS		
Benefit	Example	Metric Unit(s)
Water Quality <i>while contributing to compliance with applicable permit and/or TMDL requirements</i>	Increased filtration and/or treatment of runoff	Pollutant Load Reduction pounds (lbs)/day kilograms (kg)/day milligram/Liter microgram /Liter most probable number of bacteria or indicator organisms (mpn)/mL
	Nonpoint source pollution control	
	Reestablished natural water drainage and treatment	Volume Treated million gallons per day (mgd) acre-feet per year (afy)
Water Supply <i>through groundwater management and/or runoff capture and use¹¹</i>	Water supply reliability	Volume Captured <i>in terms of augmentation/replacement of water supply, or reduced dependence on imported water</i> million gallons per day (mgd) acre-feet per year (afy)
	Water conservation	
	Conjunctive use	Cost dollars per volume per year (of augmented water supply)
Flood Management	Decreased flood risk by reducing runoff rate and/or volume	Rate, Volume, and/or Size cubic feet per second (cfs) acre-feet (af) cubic feet (cf) acres or linear feet
	Reduced sanitary sewer overflows	
Environmental	Environmental and habitat protection and improvement, including:	Size and/or Rate acres cubic feet per second (cfs) carbon sequestration (megagrams of carbon per area)
	- wetland enhancement/creation; - riparian enhancement; and/or - instream flow improvement	

¹¹ Groundwater management and/or runoff capture and use also includes “on-farm” flood flow capture and recharge projects located on suitable agricultural lands.

TABLE 3. BENEFIT METRICS		
Benefit	Example	Metric Unit(s)
Environmental <i>(continued)</i>	Increased urban green space	Other ¹² area units of landscape and buffer measure of improved hydrology number of biotic structure number of physical structures
	Reduced energy use, greenhouse gas emissions, or provides a carbon sink	
	Reestablishment of the natural hydrograph	
	Water temperature improvements	
Community	Enhanced and/or created recreational and public use areas	Size size of population served number of people number of jobs acres
	Community involvement	
	Employment opportunities provided	

2. Integrated Metrics-Based Analysis

The Storm Water Resource Plan should include an integrated watershed-based and metrics-based analysis demonstrating that the proposed storm water and dry weather runoff capture projects and programs within the watershed will collectively address the Plan’s storm water management objectives and produce the proposed multiple benefits identified per the guidance in Section VI.D. The following guidance provides the minimum level of information to be included in an integrated metrics-based analysis for different types of projects within the watershed.

a. Water Quality Projects Analysis

The Storm Water Resource Plan should include a watershed-based analysis of how existing and proposed projects/programs comply with or are consistent with Total Maximum Daily Loads, applicable NPDES permit and/or waste discharge requirements. The analysis for water quality projects should simulate the proposed watershed-based outcomes using modeling, calculations, pollutant mass balances, water volume balances and/or other methods of analysis that provide the following, as applicable:

¹² California Wetlands Monitoring Workgroup (CWMW). 2013. California Rapid Assessment Method (CRAM) for Wetlands, Version 6.1 pp. 67:

- **Landscape and buffer** metrics includes aquatic area abundance (for bar-built estuaries this includes stream corridor continuity, aquatic area in adjacent landscape, and marine connectivity) and buffer (percent of area with buffer, average buffer width, and buffer condition).
- **Hydrology** metrics includes water source, hydroperiod or channel stability, and hydrologic connectivity.
- **Biotic structure** metrics includes plant community (number of plant layers present or endemic species richness (vernal pools only), number of co-dominant species, and percent invasion), vertical biotic structure, horizontal interspersions, and native plant species richness.
- **Physical structure** metrics includes structural patch richness and topographic complexity.

TABLE 4. STORM WATER MANAGEMENT BENEFITS		
Benefit Category	Main Benefit	Additional Benefit
Water Quality <i>while contributing to compliance with applicable permit and/or TMDL requirements</i>	Increased filtration and/or treatment of runoff	Nonpoint source pollution control
		Reestablished natural water drainage and treatment
Water Supply <i>through groundwater management and/or runoff capture and use</i>	Water supply reliability	Water conservation
	Conjunctive use	
Flood Management	Decreased flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows
Environmental	Environmental and habitat protection and improvement, including; - wetland enhancement/creation; - riparian enhancement; and/or - instream flow improvement	Reduced energy use, greenhouse gas emissions, or provides a carbon sink
		Reestablishment of the natural hydrograph
	Increased urban green space	Water temperature improvements
Community	Employment opportunities provided	Community involvement
	Public education	Enhance and/or create recreational and public use areas

E. PLAN IMPLEMENTATION STRATEGY AND SCHEDULING OF PROJECTS

1. Resources for Plan Implementation

A Storm Water Resource Plan should identify the resources that the participating entities are committing for implementation of the Plan. The Plan should include the following items to ensure its effective implementation. (Wat. Code, § 10562, subd. (d)(8).):

- a. Projection of additional funding needs and sources for administration and project implementation needs, above and beyond the needs of the existing storm water management plans and/or integrated regional water management plans; and
- b. Schedule for arranging and securing Plan financing for project implementation, including identification of phased Plan and/or project implementation.



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	University of California, Davis
Name of Primary Contact	Lisa Moretti
Mailing Address	EH&S, One Shield Ave, Davis, CA 95616
E---mail	lmoretti@ucdavis.edu
Phone (###)###-####	530-752-0177
Other Cooperating Agencies/Organizations	
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Agricultural Stormwater Improvements
Project Description (Briefly describe the project, in 300 words or less,)	Agricultural runoff currently enters the storm drain system directly. This projects would create retention basins and vegetated ditches to collect stormwater and irrigation runoff along edges of agricultural fields.

Project Location:	Davis, CA
Latitude:	
Longitude:	
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	From Russell Blvd to Putah Creek from Hwy 113 to Rd 98
County:	Yolo County
City/Community:	Davis
Watershed:	Putah Creek
Groundwater Basin:	
Planning Area:	
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input checked="" type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	2019

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Improve water quality of receiving water and reduce stormwater runoff.
Objective(s) that the Project will help accomplish:	Capture and infiltrate stormwater and reduce pollutant runoff.

Explanation of Project linkage to goals and objectives	Project's retention basin will capture stormwater and allow for settling of sediment to ultimate reduce the amount of stormwater runoff and limit pollutants discharging to Putah Creek.
How will the project be measured to ensure the goals and objectives are being fulfilled?	Project will be measured in the amount of stormwater captured and/or treated prior to discharge.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	Capture and reuse of irrigation water
Urban Water Use Efficiency	N/A
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	N/A
Conveyance --- Regional / local	N/A
System Reoperation	N/A
Water Transfers	N/A
Increase Water Supply	
Conjunctive Management & Groundwater	Increased infiltration to groundwater
Desalination	N/A
Precipitation Enhancement	N/A
Recycled Municipal Water	N/A
Surface Storage ----- CALFED	N/A
Surface Storage ----- Regional / Local	N/A

Improve Water Quality	
Drinking Water Treatment and Distribution	N/A
Groundwater and Aquifer Remediation	N/A
Matching Water Quality to Use	N/A
Pollution Prevention	Improve water quality of stormwater runoff
Salt and Salinity Management	N/A
Urban Runoff Management	N/A
Practice Resources Stewardship	
Agricultural Lands Stewardship	Improvements to agricultural land
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	N/A
Forest Management	N/A
Land Use Planning and Management	N/A
Recharge Areas Protection	N/A
Water---dependent Recreation	Improve water quality to receiving water
Watershed Management	Water quality improvement
Improve Flood Management	
Flood Risk Management	Increased water storage

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply			
Improve Water Quality		Reduced discharge of sediment, fertilizer and pesticides	
Groundwater Improvements			
Water Conservation and Reuse	✓	Capture and infiltration of excess irrigation and stormwater	

Watershed Rehabilitation	<input checked="" type="checkbox"/>	Creates wetland habitat and Improves water quality of discharges to Putah Creek	water quality sampling will verify improvement
Habitat Improvements	<input type="checkbox"/>		
Flood Management	<input type="checkbox"/>	Reducing flooding potential with increased stormwater storage	

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	Improvement of water quality, increase in storage
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	N/A
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	N/A
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	N/A

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>Provides increased flood storage for expected intense rainfall events</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>N/A</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)		\$250,000
2. Annual Operations and Maintenance (O&M)		\$10,000
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.	UC Davis Deferred Maintenance	
d. For capital projects, explain how operation and maintenance costs will be financed.	Funded by general funds. Staff already hired.	
e. Basis for project cost		
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Develop scope	2017	2017
b. Planning	coordinating timeline	2017	2017
c. Environmental Documentation (CEQA/NEPA)	In-house environmental review and	2018	2019
d. Permitting	Obtain NPDES permits	2018	2019
e. Tribal Consultation	During CEQA	2018	12/2017 2017
f. Design	Develop plans	2018	2019
g. Construction/Implementation	implement project	2019	2020

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>UC Davis Long Range Development Plan</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>UC Davis Long Range Development Plan</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>TBD</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

Project Information Form **SWRP Projects Addendum**

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Constructing retention basins will improve water quality of stormwater discharge to Putah Creek, resulting in improved water quality of the downstream receiving water and reduction of peak flow runoff.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	x	Provides treatment of stormwater runoff, increase in stormwater retention	
Water Supply – Water supply reliability	x	Reuse of excess irrigation water	
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	x	Increase of stormwater retention, reduces peak flow	
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided	x	Employment opportunities during the construction and continued O&M	
Community – Public education	x	Signage and outreach programs will educate public on stormwater runoff	

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	x	Reduction in nitrate levels and suspended sediment	ongoing pre and post project monitoring will determine results.
Water Quality – Reestablished natural water drainage and treatment	x	Provide natural treatment of stormwater	ongoing pre and post project monitoring will determine results.
Water Supply – Water conservation	X	Reuse of excess irrigation water	
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph	x	Increase in stormwater detention	
Environmental – Water temperature improvements			
Community – Community involvement	x	Public outreach about stormwater	
Community – Enhance and/or create recreational and public use areas	x	Existing areas will be enhanced through improved aesthetics in areas used by public	



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	University of California, Davis
Name of Primary Contact	Lisa Moretti
Mailing Address	EH&S, One Shield Ave, Davis, CA 95616
E-mail	lmoretti@ucdavis.edu
Phone (###)###-####	530-752-0177
Other Cooperating Agencies/Organizations	
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Arboretum Waterway Wetland Restoration and Enhancement
Project Description (Briefly describe the project, in 300 words or less,)	UC Davis is proposing to enhance the Arboretum Waterway, which captures stormwater discharge from 900 acres of the UC Davis campus, by establishing a wetland area to treat stormwater discharge and recycled water prior to discharge to Putah Creek. This project will include establishing wetlands, increasing stormwater retention, slope stabilization, enhancing a recreation area for the public, utilization of recycled water for irrigation, and creating public education opportunities.

Project Location:	Davis, CA
Latitude:	
Longitude:	
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	
County:	Yolo County
City/Community:	Davis
Watershed:	Putah Creek
Groundwater Basin:	
Planning Area:	
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input checked="" type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input checked="" type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Preserve and enhance water-related recreational opportunities, Protect and enhance habitat and biological diversity of native and migratory species.
Objective(s) that the Project will help accomplish:	Provide adequate flood protection for all urban and rural areas within the Region by December 31, 2050, Restore native vegetation and form and function along riparian corridors, canals, and other aquatic sites throughout the Region through 2035 to provide stream shading, habitat enhancement, and increased biological diversity.

<p>Explanation of Project linkage to goals and objectives</p>	<p>Project will provide new habitat for migrating species, and increase the water-related birdwatching opportunities in an urban area. It will also provide enhanced flood storage and protection. The addition of native riparian and emergent marsh vegetation will increase habitat for wildlife, clean the water in the Arboretum, and provide opportunity for the public to participate in restoration and management of the resource.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Project will be measured in percent increase in vegetative cover, provision of amenities that foster increased positive recreation and visitor experience.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	N/A
Urban Water Use Efficiency	Use of recycled water for irrigation
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	Improve water quality of stormwater runoff
Salt and Salinity Management	Reduction of nitrogen loading
Urban Runoff Management	Treatment of urban runoff
Practice Resources Stewardship	
Agricultural Lands Stewardship	N/A
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	Habitation creation
Forest Management	N/A
Land Use Planning and Management	
Recharge Areas Protection	N/A
Water-dependent Recreation	Improve water quality to receiving water
Watershed Management	Habitat creation, water quality improvement
Improve Flood Management	
Flood Risk Management	Reducing flood risk by increasing storage

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre-feet of water supplied, acres of habitat restored)
Increase Water Supply			
Improve Water Quality		Lowering of levels of nitrates and increase in oxygen levels in discharge to Putah Creek	1.2 MGD water cleaned daily.
Groundwater Improvements			
Water Conservation and Reuse	✓	Recycled water will be used for irrigation water to supplement storm water	1.2 MGD reused daily.

Watershed Rehabilitation	<input checked="" type="checkbox"/>	Creates wetland habitat and improves water quality of discharges to Putah Creek	water quality sampling will verify improvement
Habitat Improvements		Creates wetland habitat	15 acres of restored habitat
Flood Management		Reducing flooding potential	10 acre-feet of storage created.

Other Benefits:

Creates a recreational area for public viewing of wildlife and provides education opportunities for the public and students on wetland and riparian habitats in an urban setting.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	Improvement of water quality, habitat creation
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	N/A
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	N/A
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	N/A

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>Provides increased flood storage for expected intense rainfall events, increases vegetation and shade to cool surrounding areas, increases wildlife habitat in an area that will have increased stress on wildlife populations.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>Greenhouse gas sequestration in wetlands</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	\$4 million	
2. Annual Operations and Maintenance (O&M)	\$20,000	
b. List secured source(s) of funding	Source(s)	Amount
	UC Davis	\$3 million

c. List proposed source(s) of funding and certainty of the sources.	UC Davis	90%
d. For capital projects, explain how operation and maintenance costs will be financed.	Funded by general funds. Staff already hired.	
e. Basis for project cost	Previous construction costs for Phase 1.	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	developed project	Done	Done
b. Planning	coordinating timeline and schedule	8/2017	12/2017
c. Environmental Documentation (CEQA/NEPA)	In-house environmental review and administration	11/2017	12/2017
d. Permitting	obtain permits. only one required is CDFW 1600	1/2018	5/2018
e. Tribal Consultation	Coordinate with tribal representative on construction	11/2017	12/2017
f. Design	design and engineer final project - prepare construction drawings and engineer	6/2018	12/2018
g. Construction/Implementation	implement project	6/2019	12/2019

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>UC Davis Stormwater Master Plan Update</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>UC Davis Long Range Development Plan</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>UC Davis Stormwater Master Plan Update - technical sections</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is “no”, do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Establishing wetland will improve water quality of stormwater discharge to Putah Creek, resulting in improved water quality of the downstream receiving water and reduction of peak flow runoff.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	x	Provides treatment of stormwater runoff, increase in stormwater retention	Treatment of stormwater from 935 acres
Water Supply – Water supply reliability	x	Use of recycled water for irrigation	An average use of 2,000 GPM of recycled water from the UC Davis WWTP
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	x	Increase of stormwater retention, reduces peak flow	Currently the Arboretum Waterway can contain 1.8MCF
Environmental – Environmental and habitat protection and improvement	x	Establishes wetland habitat	
Environmental – Increased urban green space			
Community – Employment opportunities provided	x	Employment opportunities during the construction	
Community – Public education	x	Signage and outreach programs will educate public on wetland habitat and stormwater runoff	

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	x	Reduction in nitrate levels, suspended sediment, and increase in dissolved oxygen	ongoing pre and post project monitoring will determine results.
Water Quality – Reestablished natural water drainage and treatment	x	Wetland area will provide natural treatment of stormwater and recycled water	ongoing pre and post project monitoring will determine results.
Water Supply – Water conservation	x	Irrigation will be provided by recycled water	
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides	x	Greenhouse gas sequestration by wetlands	
Environmental – Reestablishment of the natural hydrograph	x	Increase in stormwater detention	10 acre-feet of storage
Environmental – Water temperature improvements			
Community – Community involvement	x	Volunteers assist in planting; public outreach about stormwater and wetland habitat	
Community – Enhance and/or create recreational and public use areas	x	Existing public use area will be enhanced through improved aesthetics and access to wetland habitat viewing	



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Davis
Name of Primary Contact	Rhys Rowland
Mailing Address	1717 Fifth Street Davis, CA 95616
E-mail	rrowland@cityofdavis.org
Phone (###)###-####	(530)757-5638
Other Cooperating Agencies/Organizations	None
Is your agency committed to the project through completion? If not, please explain	The City is committed to looking at the feasibility of stormwater measures city-wide which could include opportunities to redesign the current drainage and landscaping near greenbelt bike tunnels to prevent flooding.

II. General Project Information

Project Title	Bike Tunnel Landscaping Redesign for Stormwater Quality Improvement
Project Description (Briefly describe the project, in 300 words or less,)	Redesign the current drainage and landscaping near greenbelt bike tunnels to prevent flooding from stormwater. Assess the top highly-trafficked tunnels with drainage issues within the greenbelt system. Improved drainage would include re-landscaping the areas surrounding these tunnels to prevent flood events and improve stormwater quality discharges through the use of different stormwater low impact design methods through infiltration, transpiration and evaporation. Each site could showcase a different method; signage near the tunnels would illustrate the project and highlight elements of the project design.

Project Location:	
Latitude:	38.55
Longitude:	121.75
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Various locations throughout the City.
County:	Yolo
City/Community:	Davis
Watershed:	Covell Drain
Groundwater Basin:	Yolo Subbasin
Planning Area:	Yolo County
Additional Comments:	None
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input checked="" type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	Spring 2018

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Goals include #2, 7, 9 and 11.
Objective(s) that the Project will help accomplish:	Objectives include #2,14, 17, and 19.

Explanation of Project linkage to goals and objectives	By installing the project, the City will provide enhanced water quality for existing drainage within the area of the project. Improvements to the identified sites would decrease the risk of localized flooding on highly trafficked bike paths.
How will the project be measured to ensure the goals and objectives are being fulfilled?	Visual monitoring of the discharge from the sites during rain events. Visual monitoring triggers whether or not sampling is necessary in accordance with the Permit. Ultimately a combination of both recording visual monitoring and sampling would be how the project would be measured if developed.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	N/A
Urban Water Use Efficiency	May help with aquifer recharge. Impact otherwise unknown and likely small.
Improve Operational Efficiency and Transfers	
Conveyance--- Delta	Negligible impact.
Conveyance --- Regional / local	Some minor local impact as some additional water may be infiltrated or evapotranspired.
System Reoperation	N/A
Water Transfers	N/A
Increase Water Supply	
Conjunctive Management & Groundwater	Some unknown but minor amount of ground water recharge.
Desalination	N/A
Precipitation Enhancement	N/A
Recycled Municipal Water	N/A
Surface Storage-----CALFED	N/A

Surface Storage ----- Regional / Local	N/A
Improve Water Quality	
Drinking Water Treatment and Distribution	N/A
Groundwater and Aquifer Remediation	Unknown but likely insignificant.
Matching Water Quality to Use	Improved water quality for the uses that drain into this facility.
Pollution Prevention	Some improvement of receiving water quality by filtering pollutants.
Salt and Salinity Management	N/A
Urban Runoff Management	Some improvement of urban runoff quality and reduced quantity due to improved evoptranspiration.
Practice Resources Stewardship	
Agricultural Lands Stewardship	N/A
Economic Incentives (Loans, Grants, and Water Pricing)	N/A
Ecosystem Restoration	Some minor improvement for downstream enhancement for habitat quality due to improved water quality.
Forest Management	N/A
Land Use Planning and Management	N/A
Recharge Areas Protection	N/A
Water---dependent Recreation	Will aid in improving water quality for downstream beneficial uses such as recreation.
Watershed Management	Will aid in improving overall water quality, habitat enhancement and reduced runoff if developed within the watershed.
Improve Flood Management	
Flood Risk Management	Reduction in flood risk on highly trafficked bike paths.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:	<input type="checkbox"/>	Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>	May have some benefit to underground aquifer recharge if	Unknown

		developed.	
Improve Water Quality		Improved water quality due to reduced contaminants entering the stormwater system.	Unknown amount
Groundwater Improvements		Unknown	Unknown
Water Conservation and Reuse		N/A	N/A

Watershed Rehabilitation	<input type="checkbox"/>	Some impact to watershed rehabilitation by improved water quality within the watershed.	Unknown amount.
Habitat Improvements		Improves habitat both locally and downstream by improving water quality.	Unknown amount.
Flood Management		Reduced flooding during storm events in highly trafficked bike pathways.	Unknown amount.

Other Benefits:

Likely to improve aesthetic quality of the project area. Education to the public on pollution prevention and stormwater runoff awareness. Encourage microhabitats and beneficial insects.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	During construction some local impacts or temporary bike path closures.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	Some benefit to Plains and Bay Miwok tribal communities that live in the Sacramento River and Bay Delta Region downstream of the project site.
c. If applicable, describe	None known.

benefits or impacts of the project with respect to Disadvantaged Communities*.	
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	None known.
e. If applicable, describe how the project assists the region in adapting to effects of climate change.	None known.
f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.	None known.

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions Contribute to
- attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning

- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve long
- Term reduction of water use Efficient
- Groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving

watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	Estimate of \$40,000 for site survey and initial project design	
2. Annual Operations and Maintenance (O&M)	Unknown, but unlikely to be a significant increase in current costs.	
b. List secured source(s) of funding	Source(s)	Amount
	None.	

c. List proposed source(s) of funding and certainty of the sources.	Some combination of General and Enterprise funds are likely sources.	Required matching amount would be provided.
d. For capital projects, explain how operation and maintenance costs will be financed.	The sites and facilities are already maintained. Additional costs for O & M are anticipated to be small if development occurs.	
e. Basis for project cost	Similar site surveys	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Site survey would be the initial step and projects would be developed from the results of the survey.	Spring 2018	Spring 2019
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>None</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>UWMP, Stormwater Plan</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>None</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

The project would allow for greater infiltration of stormwater in greenbelts and parks reducing stormwater run-off to downstream sources. Reduced pollutant load to receiving waters via increased infiltration, transpiration and evaporation.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	By installing the project, the City will provide enhanced water quality for existing drainage within the area of the project.	Feasibility study to determine options and quantification measures.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Reduced risk of localized flooding near bike paths in greenbelts.	Feasibility study to determine options and quantification measures.
Environmental – Environmental and habitat protection and improvement	X	Potential for increasing microhabitats for beneficial insects and urban wildlife.	Feasibility study to determine options and quantification measures.
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education	X	Likely to improve aesthetic quality of the project area. Education to the public on pollution prevention and stormwater runoff awareness.	Feasibility study to determine options and quantification measures.

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation	X	Potential reduction in water needed for nearby landscaping.	Feasibility study to determine options and quantification measures.
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Davis
Name of Primary Contact	Martin Jones
Mailing Address	1818 Fifth Street Davis, CA 95616
E--mail	mjones@cityofdavis.org
Phone (###)###-####	(530)757-5656
Other Cooperating Agencies/Organizations	
Is your agency committed to the project through completion? If not, please explain	Some turf conversions are currently underway. This project would allow for additional acreage to be converted.

II. General Project Information

Project Title	Davis Greenbelts Landscape Conversions
Project Description (Briefly describe the project, in 300 words or less,)	One of the greatest assets to the Davis park system is the network of more than 60 miles of Green Belts with bike trails that connect parks and neighborhoods throughout the City. Each belt is typically between 100 to 200 feet across with an 8-foot bike path meandering through the middle. Most of the landscape consists of irrigated turf and shade trees. Large open turf areas are greatly appreciated as multi-use event areas for local neighbors, but a majority of the space is mostly utilized by the public as aesthetic while passing through on the bike path. It is these spaces that are great candidates to convert existing turf to a low water use, drought tolerant landscape with interpretive learning opportunities to show the general public ways of converting their landscapes at home.

Project Location:	Various locations in the City of Davis
Latitude:	38.56
Longitude:	121.73
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	
County:	Yolo
City/Community:	Davis
Watershed:	Covell Drain
Groundwater Basin:	Yolo Sub-basin
Planning Area:	Yolo County
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input checked="" type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Goals 2, 6, 8, 9 and 10.
Objective(s) that the Project will help accomplish:	Objectives 2,10, 11, 13 and 23.

<p>Explanation of Project linkage to goals and objectives</p>	<p>Reducing the amount of turf within the Davis Greenbelts will decrease the need for potable water for irrigation, helping to meet the 20% by 2020 water conservation goals. The implementation of low-impact design principles will help to keep water on site. Low water use wildlife and pollinator plants will increase habitat within the area. Interpretive signs will inform and provide outreach to the public on the project and low water landscaping methods.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>The water usage at the sites will be measured using AMI (advanced metering infrastructure) to compare water usage after the project is completed to baseline water usage. Estimated water savings of 1.2 million gallons of water per year for each acre converted.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

<p>Reduce Water Demand</p>	
<p>Agricultural Water Use Efficiency</p>	
<p>Urban Water Use Efficiency</p>	<p>Decrease water used for irrigation in parks and greenbelts.</p>
<p>Improve Operational Efficiency and Transfers</p>	
<p>Conveyance --- Delta</p>	
<p>Conveyance --- Regional / local</p>	
<p>System Reoperation</p>	
<p>Water Transfers</p>	
<p>Increase Water Supply</p>	
<p>Conjunctive Management & Groundwater</p>	
<p>Desalination</p>	
<p>Precipitation Enhancement</p>	
<p>Recycled Municipal Water</p>	
<p>Surface Storage ----- CALFED</p>	
<p>Surface Storage ----- Regional / Local</p>	<p>Will reduce the need for surface water for larger irrigated areas.</p>

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	Decrease the amount of urban runoff with the conversion to drip irrigation and low water use plants.
Salt and Salinity Management	
Urban Runoff Management	Decrease the amount of urban runoff with the conversion to drip irrigation and low water use plants.
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	Prioritizing heavily used parks to remain as turf areas while converting lesser used park areas and greenbelts to water-wise plantings to reduce water use.
Recharge Areas Protection	
Water-dependent Recreation	Reducing water needed to maintain heavily used turf areas.
Watershed Management	
Improve Flood Management	
Flood Risk Management	

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre-feet of water supplied, acres of habitat restored)
Increase Water Supply			
Improve Water Quality	<input type="checkbox"/>		
Groundwater Improvements			
Water Conservation	<input checked="" type="checkbox"/>	Upgrades to the irrigation system	Dependent upon the

and Reuse		and conversion of turf areas to low water use plants will decrease overall City water use.	acreage converted from turf to low water landscaping.
Watershed Rehabilitation	<input type="checkbox"/>		
Habitat Improvements		Increase wildlife and pollinator habitat within the greenbelt network by planting wildlife and pollinator friendly low water use plants.	Dependent upon the acreage converted from turf to wildlife/pollinator friendly landscaping.
Flood Management			

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	Some minor impacts to park/greenbelt areas during turf conversions.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	
d. If applicable, describe benefits or impacts of the project with respect	

<p>to Environmental Justice ** considerations.</p>	
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs	\$234,819 per acre converted	
1. Capital (2014 Dollars)		
2. Annual Operations and Maintenance (O&M)	Staff and/or contractor time to maintain drip irrigation systems and low water use landscapes.	
b. List secured source(s) of funding	Source(s)	Amount
	None	converted.

c. List proposed source(s) of funding and certainty of the sources.	Grant Funding	\$234,819/acre
d. For capital projects, explain how operation and maintenance costs will be financed.		
e. Basis for project cost	Conservation Projects Plan	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual			
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design	Preliminary design completed. More detailed design would be needed for each area undergoing conversion.	Dependent upon funding	Dependent upon funding
g. Construction/Implementation	Remove existing turf, modify irrigation system, grading, install landscape (including planting and mulch), and install interpretive panels.	Dependent upon funding	Dependent upon funding

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>Davis-Woodland Schools and Parks Water Conservation Projects Plan</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>City of Davis General Plan and UWMP</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>Davis-Woodland Schools and Parks Water Conservation Projects Plan</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Davis Greenbelts Landscape Conversions

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

Remove turf in greenbelts and convert to stormwater low impact development and low water use landscaping. An example greenbelt area was examined as part of the Davis-Woodland Schools and Parks Water Conservation Project Plan. This section of greenbelt was used as an example of turf conversion to a water conservation and stormwater quality demonstration site. This stormwater quality implementation project would mimic the process above to look for the best sites for greenbelt conversions and use the above example project as the basis to estimate costs and improvements for selected greenbelt conversions. Turf will be removed and replaced with drought tolerant native plants and a network of oak woodland and pollinator plants. Bioswales will be utilized to improve water quality in runoff, enhance habitat, recharge aquifers through infiltration and reduce water in the City's storm drain system. Impervious pathways will be converted to decomposed granite with interpretive signs illustrating public benefits of the project.

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Incorporating low-impact design measures during turf conversions in City greenbelt areas which help to retain water on-site. This will reduce pollutants into the stormwater system that are instead infiltrated into the landscape.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	Bioswales to prevent runoff, enhance habitat, recharge aquifers and reduce water in city storm drain system.	Further study of specific sites needed to determine potential stormwater benefits.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume			
Environmental – Environmental and habitat protection and improvement	X	Restore native, pollinator habitat within the greenbelt system.	Increased habitat-1 acre for each site converted.
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education	X	Opportunity for interpretive signage on low impact design and water-wise landscapes	Potential to reach hundreds of residents per year with information on stormwater quality and water conservation.

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment	X	The implementation of low impact design measures has the potential to allow for more natural water drainage and treatment.	Further study of specific sites needed to determine potential stormwater benefits.
Water Supply – Water conservation	X	Turf removal and replacement with drought tolerant native plants and a network of oak woodland and pollinator plants on a drip irrigation system.	Potential water savings of 1.2 million gallons per year per 1 acre site converted from turf to native plants/low water-use plants.
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas	X	Enhanced green space from turf to demonstration areas with increased wildlife viewing and educational opportunities.	Enhanced green space of 1 acre per site converted.



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Davis
Name of Primary Contact	Rhys Rowland
Mailing Address	1717 Fifth Street Davis, CA 95616
E--mail	rrowland@cityofdavis.org
Phone (###)###-####	(530)757-5638
Other Cooperating Agencies/Organizations	None
Is your agency committed to the project through completion? If not, please explain	Not as of yet. The City is searching for sources of funding to determine feasibility and then implementation based upon assurance of an obtainable and economical goal.

II. General Project Information

Project Title	Drainage Channel Feasibility Study
Project Description (Briefly describe the project, in 300 words or less,)	Looking to study feasibility to enhance the five separate storm drain conveyance channels to improve evoptranspiration through design improvements. This feasibility study would provide specific ways to improve the design of the existing facilities to improve water quality for the discharges that occur from each channel. The facilities are located Citywide. The study may yield that only one channel is worthy of modification. In particular, the City would like to study the El Macero Drainage Channel in southeast Davis as it is believed to be the channel with that would benefit the most from design improvements. A map can be provided to aid in located each of these drainage channels. If project is developed an educational component can be added.

Project Location:	
Latitude:	38.56
Longitude:	121.73
Can you provide a map of the project location including boundaries upon request?	X yes
Project Location Description:	Citywide, but the most interest is for the El Macero Drainage Channel located in southeast Davis.
County:	Yolo
City/Community:	Davis
Watershed:	Covell Drain
Groundwater Basin:	Yolo Subbasin
Planning Area:	Yolo County
Additional Comments:	None
Project Status (Check only one)	Study/Other
Earliest expected start date (mm/dd/yr)	Unknown until funding can be secured

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Goals include #7, 9 and 11.
Objective(s) that the Project will help accomplish:	Objectives include #6, 14, 17, and 19.

<p>Explanation of Project linkage to goals and objectives</p>	<p>Feasibility will provide determination if the existing facilities can be improved in both design and management. If the project is developed, enhanced water quality for the existing drainage channels will follow. It is not certain that enhanced infiltration will result. The project will enhance quality of habitat and aesthetic value of each facility. Any improvement of water quality to receiving water facilitates meeting the requirement of the City's Permit. Goals 7, 9, and 11. Objectives 6, 14, 17 and 19.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Visual monitoring of the discharge from the channels during storm events already occurs. Visual monitoring triggers whether or not sampling is necessary in accordance with the Permit. Ultimately a combination of both recording visual monitoring and sampling would be how the project would be measured if developed.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	N/A
Urban Water Use Efficiency	May help with aquifer recharge. Impact otherwise unknown and likely small.
Improve Operational Efficiency and Transfers	
Conveyance---Delta	Negligible impact.
Conveyance --- Regional / local	Some minor local impact as some additional water may be infiltrated or evapotranspired.
System Reoperation	N/A
Water Transfers	N/A
Increase Water Supply	
Conjunctive Management & Groundwater	Unknown
Desalination	N/A
Precipitation Enhancement	N/A
Recycled Municipal Water	N/A
Surface Storage ----- CALFED	N/A

Surface Storage ----- Regional / Local	N/A
Improve Water Quality	
Drinking Water Treatment and Distribution	N/A
Groundwater and Aquifer Remediation	Unknown
Matching Water Quality to Use	Improved water quality for the urban uses that drain into these facilities.
Pollution Prevention	Some improvement of receiving water quality by filtering pollutants.
Salt and Salinity Management	N/A
Urban Runoff Management	Some improvement of urban runoff quality and reduced quantity due to improved evoptranspiration.
Practice Resources Stewardship	
Agricultural Lands Stewardship	N/A
Economic Incentives (Loans, Grants, and Water Pricing)	N/A
Ecosystem Restoration	Some local and downstream enhancement for habitat quality.
Forest Management	N/A
Land Use Planning and Management	N/A
Recharge Areas Protection	N/A
Water---dependent Recreation	Will aid in improving water quality for downstream beneficial uses such as recreation.
Watershed Management	Will aid in improving overall water quality, habitat enhancement and reduced runoff if developed within the watershed.
Improve Flood Management	
Flood Risk Management	Minor reduction in flood risk.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:	Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	May have some benefit to underground aquifer recharge if developed.	Unknown
Improve Water Quality	Minor to significant	Unknown amount

Groundwater Improvements		Unknown	Unknown
Water Conservation and Reuse		N/A	N/A
Watershed Rehabilitation	<input type="checkbox"/>	Some impact to watershed rehabilitation by improved water quality within the watershed.	Unknown amount.
Habitat Improvements		Improves habitat both locally and downstream by improving water quality.	Unknown amount.
Flood Management		Minor impact in creating additional opportunity for stormwater runoff to evoptranspirate.	Unknown amount.

Other Benefits:

Likely to improve aesthetic quality of the project area.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	During development if it were to occur in the second phase, some local impacts related to construction noise, wildlife disturbance and potential to contribute pollutants in the channels.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	Some benefit to Plains and Bay Miwok tribal communities that live in the Sacramento River and Bay Delta Region downstream of the project site.
c. If applicable, describe benefits or impacts of the project with respect	None known.

to Disadvantaged Communities*.	
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	None known.
e. If applicable, describe how the project assists the region in adapting to effects of climate change.	None known.
f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.	None known.

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem

benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System interties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	80,000 for feasibility study	
2. Annual Operations and Maintenance (O&M)	None anticipated, but if project is developed, then O & M costs would be determined in the study.	
b. List secured source(s) of funding	Source(s)	Amount
	None.	

c. List proposed source(s) of funding and certainty of the sources.	City Enterprise funds are likely source. Uncertain if funding would be allocated at this time.	Required matching amount would be provided.
d. For capital projects, explain how operation and maintenance costs will be financed.	The sites and facilities are already maintained. Additional costs for O & M are anticipated to be small if development occurs.	
e. Basis for project cost	Estimates based upon prior experience.	
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Design, Planning	Winter 2017	Spring 2017
b. Planning	Funding being sought	Spring 2017	Winter 2018
c. Environmental Documentation (CEQA/NEPA)	Likely to be Cat Ex.	Winter 2018	Spring 2018
d. Permitting	Follows Planning.	Winter 2018	Spring 2018
e. Tribal Consultation	N/A	N/A	N/A
f. Design	Follows study.	Winter 2017	Spring 2017
g. Construction/Implementation	Follows permitting.	Spring 2018	Fall 2018

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>None</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>None</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>None</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Drainage Channel Feasibility Study

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

Feasibility study to determine the best ways to enhance the existing stormwater channels for water quality purposes. The study would provide specific ways to improve the design of all six existing drainage channels to improve water quality, through opportunities to enhance infiltration and aquatic habitat. The study would also explore ways to educate the public on water quality and other project benefits.

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

If the project is developed, enhanced water quality for the existing drainage channels will follow. The project will enhance quality of habitat and aesthetic value of each facility and aid in downstream flood management and increased water quality. Any improvement of water quality to receiving water facilitates will meet the requirements of the City's Permit.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	The primary purpose of the drainage channels is stormwater treatment and flood risk management. Any enhancements to the ponds would increase infiltration and allow for enhanced treatment of runoff.	Feasibility study to determine options and quantification measures.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	The drainage channels would be enhanced to increase stormwater infiltration and reduce runoff rate.	Feasibility study to determine options and quantification measures.
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	X	Water from non-point sources is a component of water that flows into the drainage channels. Enhancing the channels could aid in nonpoint source pollutant control.	Feasibility study to determine options and quantification measures.
Water Quality – Reestablished natural water drainage and treatment	X	Enhancing the drainage channels and potential reconfiguration could reestablish more natural water drainage and treatment.	Feasibility study to determine options and quantification measures.
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Solano County Water Agency
Name of Primary Contact	Rich Marovich
Mailing Address	810 Vaca Valley Parkway, Suite 203, Vacaville, CA 95688
E--mail	rmarovich@scwa2.com
Phone (###)###-####	(530) 902-1794
Other Cooperating Agencies/Organizations	Putah Creek Council, City of Winters
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Dry Creek Bank Stabilization and Wastewater Re-use
Project Description (Briefly describe the project, in 300 words or less,)	Dry Creek is a significant wildlife migration corridor that forms the western boundary of Winters with urban property to the north and east and agricultural land to the south and west. It is a deeply incised gully that is actively eroding both urban and agricultural properties. The City of Winters wastewater treatment plant is adjacent to Dry Creek at the northeastern corner of the city and could provide treated wastewater for bioengineering projects to enhance both stability of the banks and wildlife habitat along two miles of creek channel.

Project Location:	Dry Creek from the confluence with Lower Putah Creek to two miles upstream.
Latitude:	38.51875
Longitude:	-122.98475°
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Western boundary of the City of Winters
County:	Yolo
City/Community:	Winters
Watershed:	Lower Putah Creek
Groundwater Basin:	Solano Sub-Basin
Planning Area:	Lower Putah Creek Watershed Management Action Plan
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input checked="" type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	07/01/18

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Ensure high quality surface water; Enhance, improve, and maintain aquatic and riparian ecosystems; Reduce the risk to the people and property of Yolo County from hazards associated with storm runoff and flooding
Objective(s) that the Project will help accomplish:	Enhance the aquatic and riparian environment; use recycled water; coordinate and conjunctively manage surface water and groundwater supplies to avoid the potential adverse impacts from surface water supply development

<p>Explanation of Project linkage to goals and objectives</p>	<p>Dry Creek is eroding due to the effects of surface water storage at Lake Berryessa. Erosion has accelerated since the Solano Project was completed. Bioengineering with willows and other native vegetation can stabilize eroding banks and provide cover for migrating wildlife. Native vegetation is limited by summer water. The location of the Winters WWTP is ideal for a gravity flow system to irrigate willows and other native vegetation using bioengineering methods.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Survival and growth of native vegetation as recorded by drone flights.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	re-use of wastewater for irrigation
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	Stabilize eroding banks
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	protect benthic habitat from siltation
Improve Flood Management	
Flood Risk Management	

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>		
Improve Water Quality	<input checked="" type="checkbox"/>	Reduced sediment loading	two river miles of channel enhanced
Groundwater Improvements	<input type="checkbox"/>		
Water Conservation and Reuse	<input type="checkbox"/>		

Watershed Rehabilitation	<input type="checkbox"/>	systemic benefit from reduced fine sediment loading	benthic invertebrate surveys
Habitat Improvements	<input type="checkbox"/>	cover for migrating wildlife	2 river miles of restored riparian vegetation
Flood Management	<input type="checkbox"/>		

Other Benefits:

The City of Winters requires a 50 foot setback from the top of the bank of Dry Creek for any residential structures but most properties are non-conforming. Stabilizing eroding banks would reduce property loss and more directly address bank erosion and security of residential properties especially in high flow events.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	no adverse impacts
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	not applicable
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	not applicable
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	not applicable

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>Resilience to the increased frequency and intensity of high rainfall events</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>Tree plantings will help to absorb carbon dioxide</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	\$250,000	
2. Annual Operations and Maintenance (O&M)	\$5,000	
b. List secured source(s) of funding	Source(s)	Amount
	LPCCC	\$5,000 annually

c. List proposed source(s) of funding and certainty of the sources.	LPCCC Vegetation Management	Perpetually funded
d. For capital projects, explain how operation and maintenance costs will be financed.		
e. Basis for project cost	experience with similar projects	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual		2009	2009
b. Planning		2009	2009
c. Environmental Documentation (CEQA/NEPA)		2018	2018
d. Permitting		2018	2018
e. Tribal Consultation		2018	2018
f. Design		2018	2018
g. Construction/Implementation		2019	2019

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>Lower Putah Creek Watershed Management Action Plan</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

Project Information Form **SWRP Projects Addendum**

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Dry Creek Bank Stabilization and Wastewater Re-use

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Stabilizing the banks of Dry Creek with bioengineering (strategic plantings of willows with or without rock revetments) will reduce the ongoing mass wasting of banks and reduce the loading of fine sediments into Lower Putah Creek.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff			
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume			
Environmental – Environmental and habitat protection and improvement	x	Provide cover for migrating wildlife	two river miles of riparian vegetation
Environmental – Increased urban green space	x	Provide a shady corridor in what is now a dry gully	two river miles of riparian vegetation
Community – Employment opportunities provided			
Community – Public education	x	Enhance public policy from non-conforming setbacks to effective bank stabilization	two miles of eroding banks stabilized by vegetation

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation	x	re-use treated wastewater to irrigate riparian plantings	1-2 acres of new riparian habitat
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides	x	riparian vegetation is a carbon sink	1-2 acres of new riparian vegetation
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement	x	Inform Dry Creek landowners of a cost effective bank stabilization method	Number of enrolled landowners
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Davis
Name of Primary Contact	Rhys Rowland
Mailing Address	1717 Fifth Street Davis, CA 95616
E--mail	rrowland@cityofdavis.org
Phone (###)###-####	(530)757-5638
Other Cooperating Agencies/Organizations	None
Is your agency committed to the project through completion? If not, please explain	Not as of yet. The City is searching for sources of funding to determine feasibility and then implementation based upon assurance of an obtainable and economical goal.

II. General Project Information

Project Title	Feasibility Study for Stormwater Trash Control Measures
Project Description (Briefly describe the project, in 300 words or less,)	Feasibility study to assess options for stormwater trash control measures. This study will assess the best method(s) to help the City meet mandatory requirements for trash screening to prevent trash from entering waterways. One particular area of concern is Channel A. An option for this area is to install trash racks/debris cages in the Wildhorse Basin to address issues with trash flowing from the area directly into Channel A. There is currently no barrier between the stormwater from the basin and the channel. This study would provide an assessment of potential options to comply with the trash amendment requirements of the Small MS4 permit.

Project Location:	
Latitude:	38.55
Longitude:	121.73
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Citywide, but primarily in the northern majority of the City.
County:	Yolo
City/Community:	Davis
Watershed:	Covell Drain
Groundwater Basin:	Yolo Subbasin
Planning Area:	Yolo County
Additional Comments:	None
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input checked="" type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	Fall/Winter 2018

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Goals include #4, 7, 9 and 11.
Objective(s) that the Project will help accomplish:	Objectives include #3, 6, 14, 17, and 19.

<p>Explanation of Project linkage to goals and objectives</p>	<p>Feasibility study to assess options for stormwater trash control measures. Trash control measures will benefit water quality and aquatic habitats by keeping small particles of trash out of the conveyance system.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Visual monitoring of the discharge from the channels during storm events already occurs. Visual monitoring triggers whether or not sampling is necessary in accordance with the Permit. Ultimately a combination of both recording visual monitoring and sampling would be how the project would be measured if developed.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	N/A
Urban Water Use Efficiency	N/A
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	N/A
Conveyance --- Regional / local	N/A
System Reoperation	N/A
Water Transfers	N/A
Increase Water Supply	
Conjunctive Management & Groundwater	Unknown
Desalination	N/A
Precipitation Enhancement	N/A
Recycled Municipal Water	N/A
Surface Storage ----- CALFED	N/A
Surface Storage ----- Regional / Local	N/A

Improve Water Quality	
Drinking Water Treatment and Distribution	N/A
Groundwater and Aquifer Remediation	Unknown
Matching Water Quality to Use	Improved water quality for the urban uses that drain into these facilities.
Pollution Prevention	Some improvement of receiving water quality by capturing pollutants.
Salt and Salinity Management	N/A
Urban Runoff Management	Some improvement of urban runoff quality and reduced quantity due to improved evapotranspiration.
Practice Resources Stewardship	
Agricultural Lands Stewardship	N/A
Economic Incentives (Loans, Grants, and Water Pricing)	N/A
Ecosystem Restoration	Some local and downstream enhancement for habitat quality.
Forest Management	N/A
Land Use Planning and Management	N/A
Recharge Areas Protection	N/A
Water-dependent Recreation	Will aid in improving water quality for downstream beneficial uses such as recreation.
Watershed Management	Will aid in improving overall water quality, habitat enhancement and reduced runoff if developed within the watershed.
Improve Flood Management	
Flood Risk Management	Reduction in flood risk possible by keeping trash out of the system that might impede flows.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:	<input type="checkbox"/>	Brief Explanation of Selected Benefits	Quantification (e.g. acre-feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>	May have some benefit to underground aquifer recharge if developed.	Unknown

Improve Water Quality		Improve quality by keeping trash out of the system and any leachates from that trash.	Unknown amount
Groundwater Improvements		Unknown	Unknown
Water Conservation and Reuse		N/A	N/A

Watershed Rehabilitation	<input checked="" type="checkbox"/>	Some impact to watershed rehabilitation by improved water quality within the watershed.	Unknown amount.
Habitat Improvements		Improves habitat both locally and downstream by improving water quality and enhanced native vegetation.	Unknown amount.
Flood Management		achannels would allow flow to be unimpeded and potentially reduce flood risk.	Unknown amount.

Other Benefits:

Likely to improve aesthetic quality of the project area and help the City to meet trash control requirements for stormwater quality purposes.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	No expected impacts from the feasibility study.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	Some benefit to Plains and Bay Miwok tribal communities that live in the Sacramento River and Bay Delta Region downstream of the project site.

<p>c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.</p>	<p>None known.</p>
<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>None known.</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>None known.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>None known.</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions Contribute to
- attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region

- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve long
- Term reduction of water use Efficient
- Groundwater basin management
- System inertias

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi--benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs	
1. Capital (2014 Dollars)	150,000 for feasibility study
2. Annual Operations and Maintenance (O&M)	None anticipated, but if project is developed, then O & M costs would be determined in the study.
	Source(s) Amount

b. List secured source(s) of funding	None.	
c. List proposed source(s) of funding and certainty of the sources.	City Stormwater funds are likely source. Uncertain if funding would be allocated at this time.	Required matching amount would be provided.
d. For capital projects, explain how operation and maintenance costs will be financed.	The sites and facilities are already maintained. Additional costs for O & M are anticipated to be small if development occurs.	
e. Basis for project cost	Estimates based upon prior experience.	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Feasibility Study	Spring 2018	Summer 2018
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>None</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>None</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>None</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Trash control measures will benefit water quality and aquatic habitats by keeping small particles of trash out of the conveyance system.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	Improve water quality by keeping trash out of the system and any leachates from that trash.	Feasibility study to determine options and quantification measures.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Reduced risk of localized flooding if the stormwater conveyance systems are not blocked by trash.	Feasibility study to determine options and quantification measures.
Environmental – Environmental and habitat protection and improvement	X	Improve habitat by excluding trash that might otherwise degrade habitat value.	Feasibility study to determine options and quantification measures.
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County Flood Control & Water Conservation District
Name of Primary Contact	Kristin Sicke
Mailing Address	34274 State Highway 16
E--mail	ksicke@ycfcwcd.org
Phone (###)###-####	(530)662-0265
Other Cooperating Agencies/Organizations	
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Flood Monitoring Network Project
Project Description (Briefly describe the project, in 300 words or less,)	This project will install four (4) elevation (or stage) staff gages in sloughs that interact with YCFC&WCD canals as well as nine (9) precipitation gages. The goal of the project is to optimize the YCFC&WCD's conveyance system through monitoring flow and precipitation. These gages will be incorporated into the YCFC&WCD's existing SCADA system. The stage gages will be used to monitor stage in the slough system and will assist YCFC&WCD's information management and decision-making process for storm conveyance through the canal and slough systems. The precipitation gages will provide data for Yolo-County agencies to distinguish the type and quantity of rainfall events, providing information on where an increase in slough capacity is needed.

Project Location:	Countywide - intersection w/ winters canal and Lamb Valley Slough and winters canal
Latitude:	
Longitude:	
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Western Yolo sloughs: Lamb Valley, Cottonwood, and South Fork Willow Sloughs
County:	Yolo
City/Community:	
Watershed:	Lamb Valley, Cottonwood, and South Fork Willow Sloughs
Groundwater Basin:	Yolo
Planning Area:	Valley Floor
Additional Comments:	See SEI document "Supporting the Yolo Storm Water Resources Plan" for recommended locations
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	10/01/2018

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	2. Plan Goals 2 (improve education & awareness), 3 (improve collective understanding of watershed characteristics & functions), 4 (improve the form & function of degraded channels), 7 (preserve, improve & manage water quality), 10 (provide reliable water supplies), 11 (reduce the risks of disruptive natural disturbances), 12 (support improved regional water management)
Objective(s) that the Project will help accomplish:	Education and Awareness Objective 2; Risk Management Focus Objective 14 and 15; Understand Watershed Function Focus Objective 17 and 18; Water Supply Focus Objective 24

Explanation of Project linkage to goals and objectives	Establishing new flow networks upstream as well as close to canal and road intersections in the valley floor will help close a major knowledge gap that is documented 1995. This project will collect data that will help both flood managers and water supply/reliability managers and can be used to see how flows are coming in from precipitation events, as well as how flows circulate during irrigation season.
How will the project be measured to ensure the goals and objectives are being fulfilled?	The monitoring system will be integrated into the District's Water Resource Information Database. The project will be measured by the number of sites monitored and data collected.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	Improve understanding of flows being delivered vs infiltrating/evaporating
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	Improve understanding of the storm conveyance system and irrigation flows
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	Improve understanding of flows being delivered vs infiltrating/evaporating
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	improve land use planning and management by improving knowledge of slough conditions and storm water flows.
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	Boistering information management, improve watershed management, management actions for improved water management
Improve Flood Management	
Flood Risk Management	increase in local knowledge of the behaviors of sloughs and storm flows

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>		
Improve Water Quality	<input type="checkbox"/>		
Groundwater Improvements	<input type="checkbox"/>		
Water Conservation and Reuse	<input type="checkbox"/>		

Watershed Rehabilitation	<input type="checkbox"/>		
Habitat Improvements	<input type="checkbox"/>		
Flood Management	<input type="checkbox"/>	Increased knowledge of existing flooding issues can help water managers and	Conceptual project, but will result in action that can reduce localized flooding

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	Highway 16 at Madison is often flooded, and this is the highway giving access to the Cache Creek Casino, owned and operated by the Yocha Dehe Wintun Nation. When the highway is closed due to flooding, the casino and the Yocha Dehe Wintun Nation's land in the Capay Valley is inaccessible from the rest of Yolo County.
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	Madison is a Disadvantaged Community and the project aims to gain information that will eventually lead to alleviating flooding in Madison.
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	Madison already experiences inequitable effects of California's weather patterns with the evident regular flooding, as compared to the larger, wealthier cities in Yolo County such as Davis and Woodland which do not experience flooding to the same extent or frequency.

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>As climate change further exacerbates floods and droughts in California, Madison, a small Disadvantaged Community will continue to feel these effects though means of worse and more frequent flooding. Additional information to allow water managers to plan for and mitigate this flooding will make Madison more resilient in the face of climate change.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	\$350,000 (2017)	
2. Annual Operations and Maintenance (O&M)	TBD	
b. List secured source(s) of funding	Source(s)	Amount
	TBD	TBD

c. List proposed source(s) of funding and certainty of the sources.	TDB	TDB
d. For capital projects, explain how operation and maintenance costs will be financed.	Part of District's existing monitoring system	
e. Basis for project cost	Estimates from District's existing monitoring system	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Identify potential locations/data needed	3/8/18	10/1/18
b. Planning		10/1/18	2/1/18
c. Environmental Documentation (CEQA/NEPA)		10/1/18	2/1/18
d. Permitting		10/1/18	2/1/18
e. Tribal Consultation		10/1/18	2/1/18
f. Design		2/1/19	3/1/19
g. Construction/Implementation		3/1/19	9/1/19

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>Supporting the Yolo Storm Water Resources Plan (Yolo SWRP), SEI 2018</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:
- Flood Monitoring Network Project
- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

Would be complimented by Project 28

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Would inform conveyance capability of District sloughs and canals

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	By knowing the conveyance capacity of the system, the District can divert storm runoff into the canals when there is space available, which will retail runoff for percolation into the groundwater.	24,893 AF/Y of additional recharge of storm water through the YCFC&WCD's canal system.
Water Supply – Water supply reliability	X	By knowing the conveyance capacity of the system, the District can divert storm runoff into the canals when there is space available, which will retail runoff for percolation into the groundwater.	24,893 AF/Y of additional recharge of storm water through the YCFC&WCD's canal system.
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	By knowing the conveyance capacity of the system, the District can divert storm runoff into the canals when there is space available.	Reduce flooding due to Cache Creek by diverting up to 150 cfs of storm water runoff diverted from Cache Creek to YCFC&WCD canals.
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County Flood Control and Water Conservation District
Name of Primary Contact	Kristin Sicke
Mailing Address	34274 State Highway 16
E--mail	ksicke@ycfcwcd.org
Phone (###)###-####	(530)662-0265
Other Cooperating Agencies/Organizations	
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Forbes Ranch Regulating Pond
Project Description (Briefly describe the project, in 300 words or less,)	Develop and construct a 200 acre-feet regulating pond to reduce drainage and flood waters through the town of Madison and District canal system. Divert stormwater flows to the pond through the existing conveyance. The regulating pond would provide storm water retention during the winter and would allow for groundwater recharge in the spring and summer when capacity and water is available. The regulating pond would provide water quality benefits by allowing the sediments in the runoff to settle and lessening the transfer of pollutants and chemicals downstream. The surrounding area would have native vegetation that would promote benefits for wildlife habitat, and the property would allow for groups to visit and learn about the multi-functional project. Similar to the District's Chapman Reservoir, we would install automated gates and monitoring devices at the regulating pond that would be connected to the District's SCADA system for real-time management.

Project Location:	Forbes Ranch
Latitude:	38.663167
Longitude:	-122.022694
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	At the District's Forbes Ranch -- APN 050-010-024
County:	Yolo
City/Community:	Southwest of Madison
Watershed:	Lower Cache Creek Watershed
Groundwater Basin:	Yolo Subbasin
Planning Area:	509. Central Basin West
Additional Comments:	
Project Status (Check only one)	<input checked="" type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	01/01/2019

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirwm.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Plan Goals 2 (improve education & awareness), 3 (improve collective understanding of watershed characteristics & functions), 4 (improve the form & function of degraded channels), 7 (preserve, improve & manage water quality), 9 (protect & enhance habitat & biological diversity of native species), 10 (provide reliable water supplies), 11 (reduce the risks of disruptive natural disturbances), 12 (support improved regional water management), 13 (support sustainable economic activities)
Objective(s) that the Project will help accomplish:	Education and Awareness Objective 2; Risk Management Focus Objective 14 and 15; Understand Watershed Function Focus Objective 17 and 18; Water Supply Focus Objective 24

Explanation of Project linkage to goals and objectives	The multi-beneficial regulating pond would assist in capturing part of the peak flows within the canal system during storm water events and would reduce flooding to Madison and downstream Winters Canal. The pond allows for groundwater recharge in the spring and summer months to increase water supplies within the County.
How will the project be measured to ensure the goals and objectives are being fulfilled?	The District will connect the automation and monitoring at the regulating pond to the existing SCADA system to ensure real-time management, and to keep track of retained flows and losses to groundwater. The District will keep a list of tours given throughout the year to track educational outreach and will coordinate with Madison to determine the extent of reduced flooding.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	Provides greater flexibility to ensure consistent regional conveyance of stormwater flows, irrigation deliveries, and groundwater recharge.
System Reoperation	Provides greater flexibility to ensure consistent regional conveyance of stormwater flows, irrigation deliveries, and groundwater recharge.
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	Recharging groundwater by retaining water and allowing to percolate.
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	

Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	Increase local surface storage available.

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	Reduces pollutants and contaminants in delayed retention period.
Salt and Salinity Management	
Urban Runoff Management	Reduces extraneous runoff to town of Madison and downstream Winters canal system.
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	
Improve Flood Management	
Flood Risk Management	Reduces downstream flooding to Winters Canal and flooding to town of Madison. downstream flooding to Winters Ca

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>	Groundwater recharge from stormwater & irrigation-season retention	Depends on the water year

Improve Water Quality		Settling of pathogens, nutrients, and metals during delayed retention period.	
Groundwater Improvements		Increased groundwater supply from stormwater & irrigation-season retention	Depends on the water year
Water Conservation and Reuse	✓		Capture of stormwater for groundwater recharge & irrigation reuse

Watershed Rehabilitation	✓	Improved channel erosion Winters Canal upstream and downstream of pond	Reduction in flows conveyed downstream of pond will improve channel erosion -- not sure how to quantify the benefit. Also improved upstream because less "bottlenecks"
Habitat Improvements		Increased native vegetation & provide habitat improvements	
Flood Management		Reduced peak discharge from storm events to town of Madison and downstream Winters Canal	(Need to work with SEI) Peak flow estimated at x cfs; potential to capture 100 cfs during a 24-hour storm

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	
--	--

<p>b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.</p>	<p>The District will consult with the Yocha Dehe Wintun Nation to determine the coordination necessary during construction of the regulating pond.</p>
<p>c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.</p>	<p>The regulating pond would reduce part of the peak flows through Madison and downstream Winters Canal.</p>
<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>N/A</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>With increased intensity, duration, and frequency of storm events the project will assist the area in capturing additional flow to reduce flooding impacts to Madison and downstream Winters Canal, and to recharge the groundwater and increase groundwater supply.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>N/A</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR

- Effectively resolve significant water-related conflicts within or between regions Contribute to
- attainment of one or more of the objectives of the CALFED Bay-Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve long
- Term reduction of water use Efficient
- Groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re-establish river-floodplain hydrologic continuity, re-introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water

- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs	
-------------------------	--

1. Capital (2014 Dollars)	\$700,000	
2. Annual Operations and Maintenance (O&M)	\$50,000	
b. List secured source(s) of funding	Source(s)	Amount
c. List proposed source(s) of funding and certainty of the sources.	District water users	
d. For capital projects, explain how operation and maintenance costs will be financed.	District water users	
e. Basis for project cost	Estimate	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual			
b. Planning		January 2018	
c. Environmental Documentation (CEQA/NEPA)		July 2018	
d. Permitting		July 2018	
e. Tribal Consultation		January 2018	
f. Design		April 2018	June 2018
g. Construction/Implementation		October 2018	

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is “no”, do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Forbes Ranch Regulating Pond

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Construction of a 200 acre-feet regulating pond to function as a stormwater retention pond and groundwater recharge pond. The pond will reduce drainage and flood waters from the hills, and provide an immediate downstream storm water benefit to the town of Madison and downstream Winters Canal.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	Settling of pathogens, nutrients, and metals during delayed retention period.	
Water Supply – Water supply reliability	X	Groundwater recharge from stormwater & irrigation-season retention	
Water Supply – Conjunctive use	X	Groundwater recharge from stormwater & irrigation-season retention	
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Reduced flood risk by reducing runoff volume to Madison and downstream Winters Canal	
Environmental – Environmental and habitat protection and improvement	X	Increased native vegetation & provide habitat improvements	
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education	X	Ideally this would be a place for people to come learn about integrated water management in Yolo County -- stormwater, groundwater recharge, and environmental habitat/benefits	

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment	X	Slowing of flows will result in reestablished natural water drainage and settling of solids in a regulating/ retention pond	
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County
Name of Primary Contact	Panos Kokkas
Mailing Address	292 West Beamer Street Woodland, CA 95695
E--mail	Panos.Kokkas@yolocounty.org
Phone (###)###-####	(530) 666-8857
Other Cooperating Agencies/Organizations	Knights Landing CSD
Is your agency committed to the project through completion? If not, please explain	Yes, pending funding availability

II. General Project Information

Project Title	Knights Landing Storm Drain Project
Project Description (Briefly describe the project, in 300 words or less,)	Design and construct a new storm drain or culvert in the vicinity of 4 th and Railroad streets in the community of Knights Landing. KL has historically experience standing water (localized flooding) in the northern portions of town that can be as deep as 2 feet in wet years. The new storm drainage would convey storm water to the County's existing drainage system on the east side of Railroad Street. Design and construction are proposed to be completed by Public Works.

Project Location:	Knights Landing
Latitude:	38.799775
Longitude:	-121.717874
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	vicinity of 4 th and Railroad streets in the community of Knights Landing
County:	Yolo
City/Community:	Knights Landing
Watershed:	Lower Sacramento
Groundwater Basin:	Yolo
Planning Area:	Valley Floor
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input checked="" type="checkbox"/> Design <input checked="" type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	2018

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	5; 7; 11; 12
Objective(s) that the Project will help accomplish:	14; 19; 20; 22

Explanation of Project linkage to goals and objectives	Knights Landing is considered a Disadvantaged Community and Economically Disadvantaged Area. This project would meet Goal 5 by improving public-health and flood protection. Water captured by the drainage facility will be treated prior to discharge to preserve the downstream water quality.
How will the project be measured to ensure the goals and objectives are being fulfilled?	flood reduction and volume/flow captured

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	The storm drains will divert the waters downstream to either Ridge Cut Slough or the Sacramento River
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	
Improve Flood Management	
Flood Risk Management	The storm drains will divert the waters downstream to either Ridge Cut Slough or the Sacramento River

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply			
Improve Water Quality		Water captured by the drainage facility will be treated prior to discharge.	acre-feet of water captured/conveyed
Groundwater Improvements	<input type="checkbox"/>		
Water Conservation and Reuse			

Watershed Rehabilitation	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		
Habitat Improvements	<input type="checkbox"/>		
Flood Management	<input type="checkbox"/>	Water captured by the drainage facility will be treated prior to discharge.	acre-feet of water captured/conveyed

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	Minor noise/traffic impacts during construction
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	According to the DWR DAC Mapping Tool, Knights Landing is a Disadvantaged Community. This project would entirely benefit Knights Landing.
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	According to the DWR DAC Mapping Tool, Knights Landing is a Disadvantaged Community. This project would entirely benefit Knights Landing.

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>As storm events grow more frequent and more intense due to climate change, the storm drainage facilities will help the Town of Knights Landing convey these flows downstream back into the Sacramento River System.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>NA</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	\$100,000	
2. Annual Operations and Maintenance (O&M)		
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.	State Grants	
d. For capital projects, explain how operation and maintenance costs will be financed.	County Funds	
e. Basis for project cost		
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual			
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design	Design storm drains	2018	
g. Construction/Implementation	Construct storm drains		

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>Yolo County Improvement Standards Section 9 - Storm Drainage, Yolo County Depth of Flooding Map for Knights Landing for 100 year flood events, Guidance for Yolo County Drainage Study Reports</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>Yolo County LIDAR data</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

The storm drains will convey runoff that causes localized flooding within Knights Landing downstream to Ridge Cut slough or the Sacramento River.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	x	Yolo County Standards state that detention facilities should minimize impacts of stormwater runoff on water quality by incorporating BMPs	The drainage facilities would be sized to convey xx cfs per event. On average, the drainage facility could capture xx AFY.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	x	Underground drainage facilities will convey the water that would normally pool and flood the town of Knights Landing to Ridge Cut Slough or the Sacramento River	The drainage facilities would be sized to convey xx cfs per event. On average, the drainage facility could capture xx AFY.
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	x	Yolo County Standards state that detention facilities should minimize impacts of stormwater runoff on water quality by incorporating BMPs	The drainage facilities would be sized to convey xx cfs per event. On average, the drainage facility could capture xx AFY.
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows	x	The town of Knights Landing is on sanitary sewers and flooding puts the town at risk of overflows.	The drainage facilities would be sized to convey xx cfs per event away from the sanitary sewers.
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County/
Name of Primary Contact	Panos Kokkas
Mailing Address	292 West Beamer Street Woodland, CA 95695
E--mail	Panos.Kokkas@yolocounty.org
Phone (###)###-####	(530) 666-8857
Other Cooperating Agencies/Organizations	Knights Landing CSD
Is your agency committed to the project through completion? If not, please explain	Yes, pending funding availability

II. General Project Information

Project Title	Knights Landing Underground Drainage Study
Project Description (Briefly describe the project, in 300 words or less,)	This project would model new underground drainage facilities for the entire Town of Knights Landing to determine location(s) for outfall to the Sacramento River or Ridge Cut Slough. Preliminarily it is estimated that the underground drainage facilities would be sized for 30-50 cfs of storm flows and the system outfall would need to be sized accordingly to prevent backup of the system. Outfall locations would also need to be evaluated to determine if the downstream capacity would be sufficient to convey this additional flow during storm events. LID strategies will be used to ensure discharge water quality does not impact the Sacramento River or Ridge Cut Slough water quality.

Project Location:	Knights Landing, Ridge Cut Slough, Sacramento River
Latitude:	38.802006
Longitude:	-121.718051
Can you provide a map of the project location including boundaries upon request?	X Yes N/A No
Project Location Description:	Entire town of Knights Landing. Locations on Ridge Cut Slough/Sacramento River TBD
County:	Yolo
City/Community:	Knights Landing
Watershed:	Lower Sacramento
Groundwater Basin:	Yolo
Planning Area:	Valley Floor
Additional Comments:	
Project Status (Check only one)	Conceptual Planning CEQA/NEPA Permitting Design Construction/Implementation x Study/Other Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	2018

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	5. Improve water-related public health across the Region and emphasize improvements for populations most in need. 7. Preserve, improve, and manage water quality to meet designated beneficial uses for all water bodies within the Region. 11. Reduce the risks of disruptive natural and human-caused disturbances affecting the region's water resources, including flooding, fire, and significant institutional interruptions that reduce resources management services. 12. Support improved regional water management through governance throughout the Region that uses science and
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	collaboration to make fair and equitable decisions and investments.
Objective(s) that the Project will help accomplish:	14. Provide adequate flood protection for all urban and rural areas within the region by December 31, 2050. 19. Address pollutant sources to meet runoff standards and total maximum daily load (TMDL) targets. 22. Meet all drinking water and wastewater discharge standards
Explanation of Project linkage to goals and objectives	This project will achieve the above goals and objectives by modeling potential conveyance locations to move or detain flood flows from the Town of Knights Landing to the Sacramento River or Ridge Cut Slough. Water captured by the drainage facility will be treated prior to discharge to the Sacramento River or Ridge Cut Slough.
How will the project be measured to ensure the goals and objectives are being fulfilled?	The model used will be able to report on the expected flow and volume of water removed from Knights Landing during unit storm events.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance--- Delta	
Conveyance --- Regional / local	The study will model optimal locations for the drainage system outfall to the Sacramento River or Ridge Cut Slough.
System Reoperation	
Water Transfers	

Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	This project would support the installation of underground drainage facilities for the town of Knights Landing.
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	
Improve Flood Management	
Flood Risk Management	This study would model flooding in Knights Landing, as well as drainage conveyance and potential outfall locations in the Sacramento River or Ridge Cut Slough.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:	<input type="checkbox"/>	Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply			

Improve Water Quality		Water captured by the drainage facility will be treated prior to discharge.	Acre-feet of water captured/conveyed
Groundwater Improvements			
Water Conservation and Reuse			

Watershed Rehabilitation	<input type="checkbox"/>		
Habitat Improvements			
Flood Management		This study would support the design of underground drainage facilities for the Town of Knights Landing.	acre-feet of water captured/conveyed

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	This project is a study; no impacts anticipated.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	NA

<p>c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.</p>	<p>According to the DWR DAC Mapping Tool, Knights Landing is a Disadvantaged Community. This project is a study; no impacts anticipated.</p>
<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>NA</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>As storm events grow more frequent and more intense due to climate change, the storm drainage facilities will help the Town of Knights Landing convey these flows downstream back into the Sacramento River System.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>NA</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions Contribute to
- attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region

- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve long
- Term reduction of water use Efficient
- Groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi--benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	\$100,000	
2. Annual Operations and Maintenance (O&M)	NA	
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.	State Grants	
d. For capital projects, explain how operation and maintenance costs will be financed.	NA	
e. Basis for project cost	Engineer's Estimate	
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Modeling underground drainage facilities, Sacramento River, and Ridge Cut Slough	2018	
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>Yolo County Improvement Standards Section 9 - Storm Drainage, Yolo County Depth of Flooding Map for Knights Landing for 100 year flood events, Guidance for Yolo County Drainage Study Reports</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>Yolo County LIDAR data</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

This project would study outfall locations for drainage from the Town of Knights Landing.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	Yolo County Standards state that detention facilities should minimize impacts of stormwater runoff on water quality by incorporating BMPs	The drainage facilities would be sized to convey 30-50 cfs per event. For a 2-year event, the drainage facility could capture as much as 29 AF.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Underground drainage facilities will convey the water that would normally pool and flood the town of Knights Landing to the Sacramento River or Ridge Cut Slough.	The drainage facilities would be sized to convey 30-50 cfs per event. For a 2-year event, the drainage facility could capture as much as 29 AF.
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	x	Yolo County Standards state that detention facilities should minimize impacts of stormwater runoff on water quality by incorporating BMPs	The drainage facilities would be sized to convey 30-50 cfs per event. For a 2-year event, the drainage facility could capture as much as 29 AF.
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows	x	The town of Knights Landing is on sanitary sewers and flooding puts the town at risk of overflows.	The drainage facilities would be sized to convey 30-50 cfs per event away from the sanitary sewers.
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County FCWCD with Madison CSD
Name of Primary Contact	Kristin Sicke with Leo Resland
Mailing Address	34274 CA-16, Woodland, CA 95695
E--mail	ksicke@ycfcwcd.org
Phone (###)###-####	(530) 662-0265 ext. 112
Other Cooperating Agencies/Organizations	Potential partners include Yolo County
Is your agency committed to the project through completion? If not, please explain	Yes, pending funding availability

II. General Project Information

Project Title	Madison Drainage Study
Project Description (Briefly describe the project, in 300 words or less,)	This project would model new underground drainage facilities for the entire Town of Madison to determine location(s) for outfall (possibly Cache Creek, the South Fork Willow Slough or Cottonwood Slough). Preliminarily it is estimated that the underground drainage facilities would be sized for xx cfs of storm flows and the system outfall would need to be sized accordingly to prevent backup of the system. Outfall locations would also need to be evaluated to determine if the downstream capacity would be sufficient to convey this additional flow during storm events. LID strategies will be used to ensure discharge water quality does not negatively impact downstream water quality.

Project Location:	The Town of Madison
Latitude:	38.68
Longitude:	-121.97
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Entire town of Madison. Locations on South Fork Willow Slough/Cottonwood Slough/Cache Creek TBD
County:	Yolo
City/Community:	Unincorporated Yolo County
Watershed:	S. Fork Willow and Cottonwood Sloughs
Groundwater Basin:	Yolo Subbasin
Planning Area:	Valley Floor Area
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input checked="" type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	2018

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	<p>5. Improve water-related public health across the Region and emphasize improvements for populations most in need. 7. Preserve, improve, and manage water quality to meet designated beneficial uses for all water bodies within the Region. 11. Reduce the risks of disruptive natural and human-caused disturbances affecting the region's water resources, including flooding, fire, and significant institutional interruptions that reduce resources management services. 12. Support improved regional water management through governance throughout the Region that uses science and collaboration to make fair and equitable decisions and investments.</p>
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Objective(s) that the Project will help accomplish:	14. Provide adequate flood protection for all urban and rural areas within the region by December 31, 2050. 19. Address pollutant sources to meet runoff standards and total maximum daily load (TMDL) targets. 22. Meet all drinking water and wastewater discharge standards
Explanation of Project linkage to goals and objectives	This project will achieve the above goals and objectives by modeling potential conveyance locations to move or detain flood flows from the Town of Madison. Water captured by the drainage facility will be treated prior to discharging.
How will the project be measured to ensure the goals and objectives are being fulfilled?	Diversions to canals and/or detention basins will be metered; depths of sediment at check dams can be measured.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	The study will model optimal locations for the drainage system outfall
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	

Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	This project would support the installation of underground drainage facilities for the town of Madison.
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	
Improve Flood Management	
Flood Risk Management	This study would model flooding in Madison, as well as drainage conveyance and potential outfall locations

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply			
Improve Water Quality	<input type="checkbox"/>	Water captured by the drainage facility will be treated prior to discharge.	Acre-feet of water captured/conveyed and treated. The drainage facilities would be

			sized to convey xx cfs per event. For a 2-year event, the drainage facility could capture as much as xx AF.
Groundwater Improvements			
Water Conservation and Reuse			
Watershed Rehabilitation	<input type="checkbox"/>		
Habitat Improvements			
Flood Management		This study would support the design of underground drainage facilities for the Town of Madison.	The drainage facilities would be sized to convey xx cfs per event. On average the system will capture approximately xx afy.

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	This project is a study; no impacts anticipated.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	NA

<p>c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.</p>	<p>According to the DWR DAC Mapping Tool, Madison is a Disadvantaged Community. This project is a study; no impacts anticipated.</p>
<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>NA</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>As storm events grow more frequent and more intense due to climate change, the storm drainage facilities will help the Town of Madison convey these flows downstream back into the Sacramento River System.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>NA</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions Contribute to
- attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region

- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve long
- Term reduction of water use Efficient
- Groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi--benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	\$100,000	
2. Annual Operations and Maintenance (O&M)	NA	
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.	State Grants	
d. For capital projects, explain how operation and maintenance costs will be financed.	NA	
e. Basis for project cost	Engineer's Estimate	
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Modeling underground drainage facilities, Cache Creek, South Fork Willow Slough, and Cottonwood Slough	late 2018	
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>Yolo County Improvement Standards Section 9 - Storm Drainage, Guidance for Yolo County Drainage Study Reports</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>Yolo County LIDAR data; 1999 Madison Flood Study</p> <p>2000 Yolo County: Evaluation of Flood Control Alternatives in Yolo County</p> <p><input type="checkbox"/> 2012 Flood Insurance Study and FIRM maps</p> <p><input type="checkbox"/> 1996 Willow Slough Watershed Plan; <input type="checkbox"/> 2012 Flood Insurance Study and FIRM maps</p> <p>Yolo Co staff reports: http://yoloagenda.yolocounty.org:8085/agenda_publish.cfm?id=&mt=ALL&get_month=5&get_year=2011&dsp=agm&seq=28&rev=0&ag=4&ln=1903&nseq=50&nrev=0&pseq=&prev=# http://yoloagenda.yolocounty.org:8085/print_ag_memo.cfm?seq=4350&rev_num=0&mode=External&reloaded=true&id</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>d. If you are an Urban Water Supplier:</p>	<p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>

e. If you are an Agricultural Water Supplier:	
1. Have you completed and submitted an AWMP (due 12/31/12)?	Yes <input type="checkbox"/> No <input type="checkbox"/> <input checked="" type="checkbox"/> N/A
2. If not, will you complete and submit an AWMP prior to receiving project funding?	Yes <input type="checkbox"/> No <input type="checkbox"/> <input checked="" type="checkbox"/> N/A
f. If the project is related to groundwater:	
1. Has a GWMP been completed and submitted for the subject basin?	Yes <input type="checkbox"/> No <input type="checkbox"/> <input checked="" type="checkbox"/> N/A
2. If not will a GWMP be completed within 1 year of the grant submittal date?	Yes <input type="checkbox"/> No <input type="checkbox"/> <input checked="" type="checkbox"/> N/A

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

This project would study outfall locations for drainage from the Town of Madison.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	Yolo County Standards state that detention facilities should minimize impacts of stormwater runoff on water quality by incorporating BMPs	The drainage facilities would be sized to convey xx cfs per event. On average, the drainage facility could capture xx AFY.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Underground drainage facilities will convey the water that would normally pool and flood the town of Madison to Cache Creek, South Creek Willow Slough, or Cottonwood Slough.	The drainage facilities would be sized to convey xx cfs per event. On average, the drainage facility could capture xx AFY.
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	x	Yolo County Standards state that detention facilities should minimize impacts of stormwater runoff on water quality by incorporating BMPs	The drainage facilities would be sized to convey xx cfs per event. On average, the drainage facility could capture xx AFY.
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows	x	The town of Madison is on sanitary sewers and flooding puts the town at risk of overflows.	The drainage facilities would be sized to convey xx cfs per event away from the sanitary sewers.
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com by 1 August, 2012.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County Flood Control and Water Conservation District
Name of Primary Contact	Tim O'Halloran
Mailing Address	34274 State Highway 16, Woodland, CA 95695
E-mail	tohalloran@ycfcwcd.org
Phone (###)###-####	(530) 662-0265
Other Cooperating Agencies/Organizations	
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Moore Siphon Reliability/Restoration Project
Project Description (Briefly describe the project, in 300 words or less.)	The Moore Siphon conveys irrigation water from the north side of Cache Creek (Alder Canal) to the south side (Moore Canal). Through the Moore Siphon, YCFCWCD delivers water to approximately 15,000 acres of cropland (12% of its irrigation service area). This water also makes a significant recharge contribution to the City of Woodland's groundwater supply. Due to the age and exposure of the 72" corrugated metal pipe, as well as Cache Creek erosion issues at both ends of the siphon, the siphon well either need to be replaced or rehabilitated in the near future.



Project Location:	YCFWCWD Service Area
Latitude:	38°41'13" North
Longitude:	121°54'12" West
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	
County:	Yolo
City/Community:	
Watershed:	Lower Cache Creek
Groundwater Basin:	Yolo Subbasin 5-21.67
Planning Area:	
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input checked="" type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	11/01/13

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found in Meeting #6 Handout 4 a/b at www.westsideirwm.com/meetings. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	6. Preserve, improve, and manage water quality to meet designated beneficial uses for water bodies within the region. 7. Promote reasonable use of water and watershed resources. 9. Provide reliable water supplies of suitable quality for multiple beneficial uses (e.g., urban, agriculture, environmental, and recreation) within the region. 10. Reduce the risks of disruptive natural and human-caused disturbances affecting the region's water resources including flooding, fire and significant institutional interruptions that reduce resources management services. 12. Support sustainable economic activities within the region.
Objective(s) that the Project will help accomplish:	7. Sustain and modernize existing water supply, water quality, and flood management infrastructure throughout the planning period. 23. Improve water supply reliability to agricultural water users within the region.



Explanation of Project linkage to goals and objectives	Directly addresses Goals 6,7,9,10,12, and objectives 7 and 23 which focus on infrastructure and water supply.
How will the project be measured to ensure the goals and objectives are being fulfilled?	A final engineering project report will be completed as part of the project.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	Project will stop unintended losses.
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance - Delta	
Conveyance - Regional / local	Protects and enhances existing infrastructure and economy.
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage -- CALFED	
Surface Storage -- Regional / Local	



Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water-dependent Recreation	
Watershed Management	
Improve Flood Management	
Flood Risk Management	

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre-feet of water supplied, acres of habitat restored)
Increase Water Supply	<input checked="" type="checkbox"/>	Rehabilitating the Moore Siphon will prevent current leakage.	Approximately 1,000 acre feet annually (under normal conditions.)
Improve Water Quality			
Groundwater Improvements			
Water Conservation and Reuse	<input checked="" type="checkbox"/>	Similar to increasing water supply, rehabilitating the Moore Siphon will conserve leakage water.	Approximately 1,000 acre feet annually.



Watershed Rehabilitation			
Habitat Improvements			
Flood Management			

Other Benefits:

Provides infrastructure reliability and security to 12% of the District's irrigation service area.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	Short-term, localized streambed disturbance during construction.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	The Yocha Dehe Wintun Nation is a District customer and partner and as such will participate in the same benefits as the rest of the District's water customers.
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	



<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR
- Effectively resolve significant water-related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.



Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re-establish river-floodplain hydrologic continuity, re-introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management



ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs	
1. Capital (2012 Dollars)	\$ 1,000,000.00
2. Annual Operations and Maintenance (O&M)	\$ 20,000
b. List secured source(s) of funding	Source(s)
	Amount
	District Annual Budget



c. List proposed source(s) of funding and certainty of the sources.	Prop 84 funding	
d. For capital projects, explain how operation and maintenance costs will be financed.	Depreciation costs will be accounted for in District's annual budget.	
e. Basis for project cost	Preliminary engineer's estimate.	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	District and consultant review.	01/2011	12/2011
b. Planning	Engineering planning and preliminary design.	03/2012	06/2013
c. Environmental Documentation (CEQA/NEPA)	To be completed as required.	01/2013	12/2013
d. Permitting	To be completed as required.	01/2014	10/2014
e. Tribal Consultation	Tribal consultation and meetings are done on an ongoing basis.	03/2012	10/2013
f. Design	BY qualified engineering consultants.	06/2013	12/2013
g. Construction/Implementation	By competitive bid with qualified contractors.	10/2014	11/2014



IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

a. List water planning documents that specifically identify this project.	YCFCWCD Water Management Plan, Water Resources Association of Yolo County IRWMP.
b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)	County of Yolo General Plan.
c. List technical reports and studies supporting the feasibility of this project.	
d. If you are an Urban Water Supplier:	
1. Have you completed an Urban Water Management Plan and submitted to DWR?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2. Are you in compliance with AB1420?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Do you comply with the water meter requirements (CWC §525)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
e. If you are an Agricultural Water Supplier:	
1. Have you completed and submitted an AWMP (due 12/31/12)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
2. If not, will you complete and submit an AWMP prior to receiving project funding?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
f. If the project is related to groundwater:	
1. Has a GWMP been completed and submitted for the subject basin?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2. If not will a GWMP be completed within 1 year of the grant submittal date?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Moore Siphon

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

66" corrugated metal pipe; expected start date 04/01/18; costs expected to be closer to \$1.25M

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Improves the stormwater distribution system to properly convey storm flows downstream. Reduces the risks of disruptive natural disturbances including flooding.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff			
Water Supply – Water supply reliability	X	Allows for irrigation season flows to continue to 12% of District's agricultural users.	15,000 acres of cropland stays in production 200 AF/day of water supply for agriculture May-October (36 TAF/y)
Water Supply – Conjunctive use	X	Allows farmers to use surface water in lieu of relying on groundwater	200 AF/day of water supply for agriculture May-October (36 TAF/y)
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Reduces runoff rate to upstream and downstream surrounding properties by properly conveying flows and reducing leaking	
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation	X	Rehabilitating the Moore Siphon will prevent current leakage.	Approximately 1 TAF/y
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

North Regional Pond and Pump Station

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Mitigates flooding to the east of the City during a 100 year storm and stormwater is treated by the pond prior to discharge to the City's stormwater outfall

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	x	treatment of the stormwater prior to discharge to the City's outfall channel	up to 120 cfs
Water Supply – Water supply reliability	x	possible transmission of stored water from NR pond to adjacent farmland	reliably 500-ac ft of water during non-rainy season.
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	x		
Environmental – Environmental and habitat protection and improvement	x		
Environmental – Increased urban green space	x	75 acre pond vs 75 acre barren land	
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	x	treating stormwater before discharge to the City's outfall channel	
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas	x	additional birding habitat	



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Woodland
Name of Primary Contact	Chris Fong, Senior Associate Civil Engineer
Mailing Address	300 First Street, Woodland, CA 95695
E---mail	Chris.Fong@cityofwoodland.org
Phone (###)###-####	(530)661-5972
Other Cooperating Agencies/Organizations	
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	North Regional Pond and Pump Station
Project Description (Briefly describe the project, in 300 words or less,)	<p>The project involves the design and construction of an approximate 75 acre sedimentation pond and a pump station able to eventually accommodate a 120-cfs design flow.</p> <p>Project re-purposes an existing City evaporation pond that is no longer in use for any purpose. Currently the pond only receives nearby runoff.</p> <p>This project will add the NR Pond hydraulically into the City's storm drainage network and include:</p> <ul style="list-style-type: none"> * Low flow training wall and inlet pipes from the Gibson Channel to the NR Pond * High flow weir from South Canal to the NR Pond * Outlet pipes from NR Pond to the South Canal * Pump station at the downstream terminus of the South Canal <ul style="list-style-type: none"> * Force main and outfall from the pump station to the outfall channel



Project Location:	Just West of Co. Rd. 103 between Co. Rd. 24 and Co. Rd. 22
Latitude:	38.6689 (DD - decimal degrees)
Longitude:	-121.7112 (DD - decimal degrees)
Can you provide a map of the project location including boundaries upon request?	Yes N/A No
Project Location Description:	Just West of Co. Rd. 103 between Co. Rd. 24 and Co. Rd. 22
County:	Yolo
City/Community:	Woodland
Watershed:	
Groundwater Basin:	
Planning Area:	
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input checked="" type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	5/1/2018 to begin construction

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	<p>6. Preserve/enhance water related recreational activity - there are numerous existing ponds in the general vicinity that attract birds and local Auburn Society promotes the area for bird watching activities.</p> <p>7. Preserve, improve, and manage water quality - NR Pond will treat / settle solids in the stormwater runoff prior to discharge to the City's outfall channel that makes it Tule Canal and eventually the Sacramento River.</p> <p>10. Reliable Water Supplies for Multi-benefit uses - stored storm water used for (a) recreational habitat for water fowl; (b) agricultural water for adjacent farmland; (c) groundwater recharge.</p>
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	11. Reduce risk - NR Pond and pump station will assist the City with localized flooding issues.
Objective(s) that the Project will help accomplish:	10. Infrastructure focus - creation of stormwater asset for City to control stormwater flows 13. Recreation focus - additional birding habitat 14/15. Risk management focus - provide flood protection and reduce erosion downstream 19. Water quality focus - treat stormwater in NR pond prior to discharge 24. Supply ag water during non-rainy season to adjacent farmland.

Explanation of Project linkage to goals and objectives	Project linkage of goals and objectives indicated in the Westside Sacramento IRWM plan, June 2014
How will the project be measured to ensure the goals and objectives are being fulfilled?	Measured by: * Number of birds utilizing the NR Pond. * Water quality of the water flow going out of the NR Pond. * Control of storm flows exiting to the City's outfall channel * * Volume of water transferred for ag purposes.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	Better control of stormwater flowing out of the City
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	

Surface Storage ----- Regional / Local	local storage of stormwater flow and groundwater intrusion
--	--

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	control runoff of storm flows out of the City
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	birding habitat
Watershed Management	
Improve Flood Management	
Flood Risk Management	ability to pump stormwater flows to the City's outfall channel rather than flooding land to the east of the City.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply		interest from adjacent farmers for water stored in NR pond during non-rainy season.	500 ac-ft should reliably be available each year.
Improve Water Quality	<input type="checkbox"/>	NR pond serves as sedimentation pond to settle solids	
Groundwater Improvements			

Water Conservation and Reuse			
Watershed Rehabilitation			
Habitat Improvements		Additional birding habitat provided by NR Pond	~75 acres of additional ponds
Flood Management		NR Pond and Pump Station designed to accomodate up to 120 cfs of flow and prevent flood impacts to the east of the City.	

Other Benefits:

non-point source pollution control; increase urban greenspace; reduced energy use, GHG emission, or provides a carbon sink.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	potential environmental impacts during construction.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	N/A
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	Some DC areas are located in the City's drainage area draining to the NR Pond.

<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>N/A</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>additional greenspace</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>Usage of NR pond site as a storm water feature rather than another type of development reduces additional generation of greenhouse gases.</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	\$8,000,000	
2. Annual Operations and Maintenance (O&M)	\$100,000 (rough guess for maintenance of pond and cost to run/maintain the pumps)	
b. List secured source(s) of funding	Source(s)	Amount
	Development (SLIF funding)	100% of construction from SLIF

		development fees and 100% of O&M from SL L&L district
c. List proposed source(s) of funding and certainty of the sources.		
d. For capital projects, explain how operation and maintenance costs will be financed.	Construction is all development funded. O&M is paid out of a Landscape/Lighting District fund	
e. Basis for project cost	Engineer's Estimate of Probable Cost	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Spring Lake Infrastructure Master Plan	2002	2015
b. Planning	Update of the City's South Urban Growth Area Stormwater Master Plan	Spring 2015	Spring 2017
c. Environmental Documentation (CEQA/NEPA)	ongoing through subcontractor to West Yost	Spring 2017	Spring 2018
d. Permitting	ongoing through contract with West Yost	Fall 2017	Spring 2018
e. Tribal Consultation	N/A		
f. Design	Contract with West Yost	Spring 2017	Spring 2018
g. Construction/Implementation	Bid as public project	Spring 2018	Fall 2019

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>City of Woodland Update to Storm Drainage Facilities Master Plan South Urban Growth Area by Wood Rogers, February 2017</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>Spring Lake Specific Plan</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p>Yes No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@yfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Currently, the elevation of Highway 16 is such that it serves as a conveyance system for stormwater, causing flooding to Highway 16 which results in flooding to the town of Madison and reduced access to tribal lands. At high flows, where Highway 16 intersects the canal system, stormwater over tops the canal and travels along Highway 16 and into the town of Madison. If Highway 16 was raised by 2-4 feet as planned by Caltrans in 2010-2011, it would channel stormwater north around the town of Madison and back into the canals downstream of Madison. Raising Highway 16 would not only mitigate flood risks to the town of Madison, but also along Highway 16. This project also could coordinate with the Madison Canals project.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff			
Water Supply – Water supply reliability	x	Detention basins planned could function as groundwater recharge	AF water captured/infiltrated in detention basin
Water Supply – Conjunctive use	x	Maximizes benefit of surface water for groundwater recharge	AF water captured/infiltrated in detention basin
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	x	Detention basins reduce runoff rate to Town of Madison	AF water captured in detention basin
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation	X	Redirecting stormwater back into the canals will increase groundwater recharge, which can be used for agricultural purposes during the dry season. This will conserve treated raw water which can be used for drinking.	CFS in canals
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides	x	Higher groundwater levels from recharge can reduce energy for pumping	
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas	X	Improve in-stream flow by redirecting stormwater around the town of Madison and back into the canals.	Model based on previous closures of Hwy 16 due to flooding



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County
Name of Primary Contact	Kristin Sicke/Elise Sabatini
Mailing Address	34274 CA-16, Woodland, CA 95695
E--mail	ksicke@ycfcwcd.org
Phone (###)###-####	(530) 662-0265 ext. 112
Other Cooperating Agencies/Organizations	Project lead is Caltrans, other partners include Madison CSD, Yocha Dehe Wintun Nation and Yolo County Farm Bureau;
Is your agency committed to the project through completion? If not, please explain	Pending confirmation of Caltrans funding availability

II. General Project Information

Project Title	Raise Highway 16 Out of Flood plain
Project Description (Briefly describe the project, in 300 words or less,)	This project was initially proposed by Caltrans as flooding of Highway 16 is a chronic problem. The project was not constructed because of concerns of some farmers about grades at farm road crossings. Raising Highway 16 creates a barrier that could be used to store storm water north of the highway in detention basins/recharge ponds. Increasing the capacity of Willow Slough south of Highway 16 west of Madison is needed so that flows can be conveyed to the detention basins. Willow Slough is the source of the majority of flooding in Madison. Cottonwood Slough contributes to occasional flooding (last time was 1996) in Madison. This project could be coordinated with the Madison Canals project as other upstream diversions could benefit this project and/or the planned detention basins could be coordinated.

Project Location:	Highway 16 between Esparto and Madison, potential to Highway 505 and east
Latitude:	
Longitude:	
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Highway 16 Corridor
County:	Yolo County
City/Community:	Unincorporated Yolo County
Watershed:	S. Fork Willow and Cottonwood Sloughs
Groundwater Basin:	Yolo Subbasin
Planning Area:	Valley Floor Area
Additional Comments:	
Project Status (Check only one)	<input checked="" type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input checked="" type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input checked="" type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	Pending Caltrans confirmation

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	8. Promote reasonable use of water and watershed resources, 10. Provide reliable water supplies, 11. Reduce the risks of ...flooding; 12. Support improved regional water management through governance throughout the Region, 13. Support sustainable economic activities consistent with local and state government planning efforts within the Region
Objective(s) that the Project will help accomplish:	14. Provide adequate flood protection; GW recharge elements will: 23. Provide 100% reliability of M&I water supplies, 24. Provide Ag water supplies

Explanation of Project linkage to goals and objectives	Elevating Highway 16 out of the flood plain will allow passage during flood events that will reduce disruption to local businesses including Yocha Dehe Wintun Cache Creek Casino; Detention basins that could also function as GW recharge basins could enhance GW recharge.
How will the project be measured to ensure the goals and objectives are being fulfilled?	Number of flood events that close Highway 16 will be monitored; GW recharge can be measured with water level measurements in detention basins.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	GW recharge via detention basins
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	Detention/recharge basins can provide local storage.

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water--dependent Recreation	
Watershed Management	
Improve Flood Management	
Flood Risk Management	Elevating roadway eliminates flood risk

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre--feet of water supplied, acres of habitat restored)
Increase Water Supply		Detention/recharge basins can provide GW recharge	quantities of water recharged
Improve Water Quality			
Groundwater Improvements		GW recharge should result in water level increases	Quantities of water recharged OR Measurement of GW levels around detention/recharge basins
Water Conservation and Reuse	<input type="checkbox"/>		

Watershed Rehabilitation	<input type="checkbox"/>		
Habitat Improvements	<input type="checkbox"/>		
Flood Management	<input type="checkbox"/>	Elevating roadway reduces flood risk	Monitoring flood events that close roadway

Other Benefits:

Economic benefits of allowing roadway to remain open to residents and businesses. Increases in GW levels will reduce energy for pumping. Additional benefits may accrue if coordinated with Madison Canals project.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	Potential construction impacts may occur
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	Reduced closure of Highway 16, benefits Yoche Dehe Wintun tribe businesses
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	Project will benefit Madison (DAC) by diverting flood flows away and improving groundwater supply through recharge from detention basins.
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	Improving flood conditions in Madison, a DAC, will address Environmental justice considerations.

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>Flood frequency and depth may increase with the effects of climate change and an elevated roadway will reduce impact to local residents and businesses as a means of adapting to climate change</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>Increased GW levels from GW recharge will reduce energy for pumping GW and therefore reduce GHG emissions.</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	To be determined	
2. Annual Operations and Maintenance (O&M)	will potentially include detention basin maintenance	
b. List secured source(s) of funding	Source(s)	Amount
	County (3 funds)	\$1.2m

c. List proposed source(s) of funding and certainty of the sources.	State Grants	
d. For capital projects, explain how operation and maintenance costs will be financed.		
e. Basis for project cost		
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Caltrans info		
b. Planning	Caltrans info		
c. Environmental Documentation (CEQA/NEPA)	Caltrans prepared draft EIR as of 2011		
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

a. List water planning documents that specifically identify this project.	2011 (est) Caltrans EIR
b. List the adopted planning documents the proposed	

project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)	
c. List technical reports and studies supporting the feasibility of this project.	<p>2012 Flood Insurance Study and FIRM maps</p> <p>Yolo Co staff reports: http://yoloagenda.yolocounty.org:8085/agenda_publish.cfm?id=&mt=ALL&get_month=5&get_year=2011&dsp=agm&seq=28&rev=0&ag=4&ln=1903&nseq=50&nrev=0&pseq=&prev=# http://yoloagenda.yolocounty.org:8085/print_ag_memo.cfm?seq=4350&rev_num=0&mode=External&reloaded=true&id</p>
d. If you are an Urban Water Supplier:	
1. Have you completed an Urban Water Management Plan and submitted to DWR?	Yes No <input checked="" type="checkbox"/> N/A
2. Are you in compliance with AB1420?	Yes No <input checked="" type="checkbox"/> N/A
3. Do you comply with the water meter requirements (CWC §525)	<input type="checkbox"/> Yes No <input checked="" type="checkbox"/> N/A
4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding	Yes No <input checked="" type="checkbox"/> N/A
e. If you are an Agricultural Water Supplier:	
1. Have you completed and submitted an AWMP (due 12/31/12)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
2. If not, will you complete and submit an AWMP prior to receiving project funding?	Yes No <input checked="" type="checkbox"/> N/A
f. If the project is related to groundwater:	
1. Has a GWMP been completed and submitted for the subject basin?	<input checked="" type="checkbox"/> Yes No N/A
2. If not will a GWMP be completed within 1 year of the grant submittal date?	Yes No <input checked="" type="checkbox"/> N/A



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Davis
Name of Primary Contact	Rhys Rowland
Mailing Address	1717 Fifth Street Davis, CA 95616
E--mail	rrowland@cityofdavis.org
Phone (###)###-####	(530)757-5638
Other Cooperating Agencies/Organizations	None
Is your agency committed to the project through completion? If not, please explain	Not as of yet. The City is searching for sources of funding to determine feasibility and then implementation based upon assurance of an obtainable and economical goal.

II. General Project Information

Project Title	Retention Pond Feasibility Study
Project Description (Briefly describe the project, in 300 words or less,)	Looking to study feasibility for design enhancements for the seven separate storm drain retention ponds to improve evoptranspiration and water quality in the City's discharge. This feasibility study would provide specific ways to improve the design of the existing facilities to improve water quality for the discharges that occur from each facility. The facilities are located Citywide, but all of the ponds are located north of I 80 in the northern two thirds of the City. The study may yield that only one pond is worthy of modification. In particular, the City would like to study the Core Area Pond in central Davis as it believed to be the pond that receives the most pollutants from its drainage shed. A map can be provided to aid in located each of these ponds. If project is developed an educational component can be added.

Project Location:	
Latitude:	38.55
Longitude:	121.73
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Citywide, but primarily in the northern majority of the City.
County:	Yolo
City/Community:	Davis
Watershed:	Covell Drain
Groundwater Basin:	Yolo Subbasin
Planning Area:	Yolo County
Additional Comments:	None
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input checked="" type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	Fall/Winter 2016.

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Goals include #7, 9 and 11.
Objective(s) that the Project will help accomplish:	Objectives include #6, 14, 17, and 19.

<p>Explanation of Project linkage to goals and objectives</p>	<p>Feasibility will provide determination if the existing facilities can be improved in both design and management. If the project is developed, enhanced water quality for the existing drainage from the ponds will follow. It is not certain that enhanced infiltration will result. The project will enhance quality of habitat and aesthetic value of each facility and aid in downstream flood management. Any improvement of water quality to receiving water facilitates meeting the requirements of the City's Permit. Goals 7, 9, and 11. Objectives 6, 14, 17 and 19.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Visual monitoring of the discharge from the channels during storm events already occurs. Visual monitoring triggers whether or not sampling is necessary in accordance with the Permit. Ultimately a combination of both recording visual monitoring and sampling would be how the project would be measured if developed.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	N/A
Urban Water Use Efficiency	May help with aquifer recharge. Impact otherwise unknown and likely small.
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	Negligible impact.
Conveyance --- Regional / local	Some minor local impact as some additional water may be infiltrated or evapotranspired.
System Reoperation	N/A
Water Transfers	N/A
Increase Water Supply	
Conjunctive Management & Groundwater	Unknown
Desalination	N/A
Precipitation Enhancement	N/A
Recycled Municipal Water	N/A
Surface Storage ----- CALFED	N/A
Surface Storage ----- Regional / Local	N/A

Improve Water Quality	
Drinking Water Treatment and Distribution	N/A
Groundwater and Aquifer Remediation	Unknown
Matching Water Quality to Use	Improved water quality for the urban uses that drain into these facilities.
Pollution Prevention	Some improvement of receiving water quality by capturing pollutants.
Salt and Salinity Management	N/A
Urban Runoff Management	Some improvement of urban runoff quality and reduced quantity due to improved evapotranspiration.
Practice Resources Stewardship	
Agricultural Lands Stewardship	N/A
Economic Incentives (Loans, Grants, and Water Pricing)	N/A
Ecosystem Restoration	Some local and downstream enhancement for habitat quality.
Forest Management	N/A
Land Use Planning and Management	N/A
Recharge Areas Protection	N/A
Water---dependent Recreation	Will aid in improving water quality for downstream beneficial uses such as recreation.
Watershed Management	Will aid in improving overall water quality, habitat enhancement and reduced runoff if developed within the watershed.
Improve Flood Management	
Flood Risk Management	Minor reduction in flood risk due to increased evapotranspiration.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
	<input type="checkbox"/>		

Increase Water Supply		May have some benefit to underground aquifer recharge if developed.	Unknown
Improve Water Quality		Minor to significant dependent upon the facility.	Unknown amount
Groundwater Improvements		Unknown	Unknown
Water Conservation and Reuse		N/A	N/A
Watershed Rehabilitation	<input type="checkbox"/>	Some impact to watershed rehabilitation by improved water quality within the watershed.	Unknown amount.
Habitat Improvements		Improves habitat both locally and downstream by improving water quality and enhanced native vegetation.	Unknown amount.
Flood Management		Minor impact in creating additional opportunity for stormwater runoff to evoptranspire.	Unknown amount.

Other Benefits:

Likely to improve aesthetic quality of the project area.

Please provide a summary of the expected project benefits and impacts in the table below.

<p>a. Describe any expected impacts of the project</p>	<p>During development if it were to occur in the second phase, some local impacts related to construction noise, wildlife disturbance and potential to contribute pollutants from the ponds to receiving.</p>
<p>b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.</p>	<p>Some benefit to Plains and Bay Miwok tribal communities that live in the Sacramento River and Bay Delta Region downstream of the project site.</p>
<p>c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.</p>	<p>None known.</p>
<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>None known.</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>None known.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>None known.</p>



*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	100,000 for feasibility study	
2. Annual Operations and Maintenance (O&M)	None anticipated, but if project is developed, then O & M costs would be determined in the study.	
b. List secured source(s) of funding	Source(s)	Amount
	None.	

<p>c. List proposed source(s) of funding and certainty of the sources.</p>	<p>City Enterprise funds are likely source. Uncertain if funding would be allocated at this time.</p>	<p>Required matching amount would be provided.</p>
<p>d. For capital projects, explain how operation and maintenance costs will be financed.</p>	<p>The sites and facilities are already maintained. Additional costs for O & M are anticipated to be small if development occurs.</p>	
<p>e. Basis for project cost</p>	<p>Estimates based upon prior experience.</p>	
<p>f. Can a detailed cost estimate be provided upon request?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Design, Planning	Winter 2017	Spring 2017
b. Planning	Funding being sought	Spring 2017	Winter 2018
c. Environmental Documentation (CEQA/NEPA)	Likely to be Cat Ex.	Winter 2018	Spring 2018
d. Permitting	Follows Planning.	Winter 2018	Spring 2018
e. Tribal Consultation	N/A	N/A	N/A
f. Design	Follows study.	Winter 2017	Spring 2017
g. Construction/Implementation	Follows permitting.	Spring 2018	Fall 2018

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>None</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>None</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>None</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is “no”, do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Retention Pond Feasibility Study

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

Feasibility study to assess City stormwater detention ponds and opportunities for enhancement for water quality purposes. The ponds hold stormwater runoff from the city and eventually release the stormwater to receiving waters outside of the City. This study would evaluate the feasibility of enhancing all six of the City's existing ponds for stormwater quality purposes through improved infiltration, transpiration and evaporation through retention.

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

If the project is developed, enhanced water quality for the existing drainage from the ponds will follow. The project will enhance quality of habitat and aesthetic value of each facility and aid in downstream flood management and increased water quality. Any improvement of water quality to receiving water facilitates will meet the requirements of the City's Permit.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	The primary purpose of the ponds is stormwater treatment and flood risk management. Any enhancements to the ponds would increase infiltration and allow for enhanced treatment of runoff.	Feasibility study to determine options and quantification measures.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	The ponds would be enhanced to increase stormwater infiltration and reduce runoff rate.	Feasibility study to determine options and quantification measures.
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	X	Water from non-point sources is a component of water that flows into the detention ponds. Enhancing the ponds could aid in nonpoint source pollutant control.	Feasibility study to determine options and quantification measures.
Water Quality – Reestablished natural water drainage and treatment	X	Enhancing the ponds and potential reconfiguration could reestablish more natural water drainage and treatment.	Feasibility study to determine options and quantification measures.
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Davis
Name of Primary Contact	Martin Jones
Mailing Address	1818 Fifth Street Davis, CA 95616
E--mail	mjones@cityofdavis.org
Phone (###)###-####	(530)757-5656
Other Cooperating Agencies/Organizations	None
Is your agency committed to the project through completion? If not, please explain	Not as of yet. The City is searching for sources of funding.

II. General Project Information

Project Title	Russel Boulevard Demonstration LID Project
Project Description (Briefly describe the project, in 300 words or less,)	The project is to be located in front of City Hall (already proposed and working its way through the City's Parks and Community Services Department) along Russell Boulevard. Russel Boulevard is one of the City's prominent east-west arterials. The project is to create a vegetated swale to treat stormwater runoff on the north side of the roadway. The surface area it will treat is 8,000 square feet. It is proposed to treat drainage prior to discharge to the City's stormdrain system consistent with the standards of Section E.12 of the State's Small MS4 Phase II General Permit (Permit). A map can be provided to aid in the location of this project.

Project Location:	
Latitude:	38.55
Longitude:	121.75
Can you provide a map of the project location including boundaries upon request?	X Yes N/A No
Project Location Description:	
County:	Yolo
City/Community:	Davis
Watershed:	Covell Drain
Groundwater Basin:	Yolo Subbasin
Planning Area:	Yolo County
Additional Comments:	None
Project Status (Check only one)	X Conceptual x Planning CEQA/NEPA x Permitting x Design Construction/Implementation Study/Other Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	Spring 2017

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Goals include #2, 7, 9 and 11.
Objective(s) that the Project will help accomplish:	Objectives include #6, 14, 17, and 19.

<p>Explanation of Project linkage to goals and objectives</p>	<p>By installing the project, the City will provide enhanced water quality for existing drainage within the area of the project. Some impervious surfacing will be converted to pervious surfacing, slowing drainage over this surfacing. This will increase overall evapotranspiration and ground water recharge over what currently occurs. However the quantity of water evapotranspired is currently unknown. Given the project location and visibility, increased public awareness of pollution prevention will be achieved. Goals include #2, 7, 9 and 11. Objectives include #6, 14, 17, and 19.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Visual monitoring of the discharge from the swale during storm events would be the . Visual monitoring triggers whether or not sampling is necessary in accordance with the Permit. Ultimately a combination of both recording visual monitoring and sampling would be how the project would be measured if developed.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

<p>Reduce Water Demand</p>	
<p>Agricultural Water Use Efficiency</p>	<p>N/A</p>
<p>Urban Water Use Efficiency</p>	<p>May help with aquifer recharge. Impact otherwise unknown and likely small.</p>
<p>Improve Operational Efficiency and Transfers</p>	
<p>Conveyance--- Delta</p>	<p>Negligible impact.</p>
<p>Conveyance --- Regional / local</p>	<p>Some minor local impact as some additional water may be infiltrated or evapotranspired.</p>
<p>System Reoperation</p>	<p>N/A</p>
<p>Water Transfers</p>	<p>N/A</p>
<p>Increase Water Supply</p>	
<p>Conjunctive Management & Groundwater</p>	<p>Some unknown but minor amount of ground water recharge.</p>
<p>Desalination</p>	<p>N/A</p>
<p>Precipitation Enhancement</p>	<p>N/A</p>
<p>Recycled Municipal Water</p>	<p>N/A</p>

Surface Storage ----- CALFED	N/A
Surface Storage ----- Regional / Local	N/A

Improve Water Quality	
Drinking Water Treatment and Distribution	N/A
Groundwater and Aquifer Remediation	Unknown but like insignificant.
Matching Water Quality to Use	Improved water quality for the uses that drain into this facility.
Pollution Prevention	Some improvement of receiving water quality by filtering pollutants.
Salt and Salinity Management	N/A
Urban Runoff Management	Some improvement of urban runoff quality and reduced quantity due to improved evotranspiration.
Practice Resources Stewardship	
Agricultural Lands Stewardship	N/A
Economic Incentives (Loans, Grants, and Water Pricing)	N/A
Ecosystem Restoration	Some minor improvement for downstream enhancement for habitat quality due to improved water quality.
Forest Management	N/A
Land Use Planning and Management	N/A
Recharge Areas Protection	N/A
Water---dependent Recreation	Will aid in improving water quality for downstream beneficial uses such as recreation.
Watershed Management	Will aid in improving overall water quality, habitat enhancement and reduced runoff if developed within the watershed.
Improve Flood Management	
Flood Risk Management	Minor reduction in flood risk.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:	<input type="checkbox"/>	Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>	May have some benefit to underground aquifer recharge if	Unknown

		developed.	
Improve Water Quality		Minor to significant for the specific discharge to this DI.	Unknown amount
Groundwater Improvements		Unknown	Unknown
Water Conservation and Reuse		N/A	N/A

Watershed Rehabilitation		Some impact to watershed rehabilitation by improved water quality within the watershed.	Unknown amount.
Habitat Improvements		Improves habitat both locally and downstream by improving water quality.	Unknown amount.
Flood Management		Minor impact in creating additional opportunity for stormwater runoff to evoptranspirate.	Unknown amount.

Other Benefits:

Likely to improve aesthetic quality of the project area. Education to the public on pollution prevention and stormwater runoff awareness. Provides a model on how roadside LID looks and function providing greater public support for future roadside LID CIP projects.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	During construction some local impacts related to construction noise and potential to contribute pollutants from the site to the SW system.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	Some benefit to Plains and Bay Miwok tribal communities that live in the Sacramento River and Bay Delta Region downstream of the project site.

<p>c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.</p>	<p>None known.</p>
<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>None known.</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>None known.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>None known.</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions Contribute to
- attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region

- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve long
- Term reduction of water use Efficient
- Groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi--benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	42,763 for construction	
2. Annual Operations and Maintenance (O&M)	Unknown, but considered minor. Annual mowing of grasses in swale.	
b. List secured source(s) of funding	Source(s)	Amount
	None.	

c. List proposed source(s) of funding and certainty of the sources.	Some combination of General and Enterprise funds are likely sources.	Required matching amount would be provided.
d. For capital projects, explain how operation and maintenance costs will be financed.	The sites and facilities are already maintained. Additional costs for O & M are anticipated to be small if development occurs.	
e. Basis for project cost	Project Landscape Architect estimate.	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Design completed		Completed
b. Planning	Funding being sought	Spring 2016	Fall 2016
c. Environmental Documentation (CEQA/NEPA)	Likely to be Cat Ex.	Winter 2017	Spring 2017
d. Permitting	Follows Planning.	Winter 2017	Spring 2017
e. Tribal Consultation	N/A	N/A	N/A
f. Design	Follows study.	Fall 2016	Winter 2017
g. Construction/Implementation	Follows permitting.	Spring 2017	Fall 2017

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>None</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>None</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>None</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@yfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Russell Boulevard Demonstration LID Project

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Projects/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

Install a public demonstration site for stormwater quality improvements at City Hall. This project incorporates numerous sustainable, low impact development (LID) improvements intended to improve urban watershed processes and provide multiple watershed benefits. The benefits at the project site include capturing and treating stormwater runoff, improving groundwater recharge, increasing drought tolerant landscaping with native and drought tolerant species, increasing water conservation, creating inviting community gathering spaces and utilizing the project as a demonstration site to promote LID projects for new and existing land uses throughout the City. The project includes pervious paving, stormwater planters, rain gardens and bioswales. The area is intended to serve as an outdoor classroom for UC Davis, the Davis Joint Unified School District and the community at large. Have consulted with Yocha Dehe Wintun Nation. The timing of the project has shifted from the IRWM project form. The construction for the project is planned to begin Spring 2018. The project is consistent with the City's Urban Water Management Plan, Integrated Water Resources Study, General Plan, Stormwater Plan and Climate Action Plan.

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

This project would capture and treat stormwater runoff improving downstream water quality. Reduced pollutant load to receiving waters via increased infiltration, transpiration and evaporation.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	By installing the project, the City will provide enhanced water quality for existing drainage within the area of the project. Some impervious surfacing will be converted to pervious surfacing, slowing drainage over this surfacing.	The project site is 34,370 square feet resulting in increased infiltration of 2080 cubic feet.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Reduced risk of localized flooding near the downtown core.	The project site is 34,370 square feet resulting in reduced runoff of 2080 cubic feet.
Environmental – Environmental and habitat protection and improvement	X	Increased habitat for beneficial insects and urban wildlife.	The project site will increase habitat by 6225 square feet. 7 trees will be added to the site.
Environmental – Increased urban green space	X	Increased green space by removing impervious paving.	Increased urban green space of 2575 square feet.
Community – Employment opportunities provided	X	Volunteer opportunities to use and maintain the project site.	Estimated minimum of 500 to 1,000 volunteer hours per year.
Community – Public education	X	The project will serve as a demonstration site for the community. The area is intended to serve as an outdoor classroom for UC Davis, the Davis Joint Unified School District and the community at large. Community volunteers will assist with maintaining the project site.	Potential to reach thousands of people per year who visit City Hall, attend community events or the use the outdoor classroom.

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment	X	Reestablished natural water drainage through bioswales, permeable pavement and redirecting runoff into rain gardens.	The project site is 34,370 square feet resulting in reduced runoff of 2080 cubic feet.
Water Supply – Water conservation	X	Conversion to water-wise plants and a reduction in water needed for nearby landscaping.	Drought tolerant plantings of 11,130 square feet (1/4 acre) with the goal of a 20% reduction in overall water use for the site as compared to historic usage. Water use reduction when turf is converted to low water landscaping for 1/4 acre is estimated to be 300,000 gallons per year (based on estimates from greenbelt conversions).
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement	X	7 partnerships with community groups for this project have been identified including the Yolo County Master Gardeners, Sierra Club, UC Davis Arboretum, Yolo Resource Conservation District, California Conservation Corp and others. The area is intended to serve as an outdoor classroom for UC Davis, the Davis Joint Unified School District and the community at large.	Estimated minimum of 500 to 1,000 volunteer hours per year.
Community – Enhance and/or create recreational and public use areas	X	Increased natural habitat in the downtown core that is available to the community which will include an outdoor classroom, public art, seating area, walking tour of stormwater and water conservation demonstration areas.	Increased public use area of 34,370 square feet (project site).



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Davis
Name of Primary Contact	Rhys Rowland
Mailing Address	1717 Fifth Street Davis, CA 95616
E---mail	rrowland@cityofdavis.org
Phone (###)###-####	(530)757-5638
Other Cooperating Agencies/Organizations	None
Is your agency committed to the project through completion? If not, please explain	The City is committed to looking at the feasibility of stormwater measures city-wide which could include opportunities to convert rocky swales to bioswales.

II. General Project Information

Project Title	Site Survey for Converting Rocky Swales to Bioswales
Project Description (Briefly describe the project, in 300 words or less,)	In public greenbelts and parks, convert existing rocky drainage swales into bioswales to provide environmental benefits. Convert drainage in areas that currently use rocky swales, such as in Mace Ranch Park and the housing development behind Montgomery Elementary in South Davis, to bioswales. Converting the existing rocky swales to vegetative bioswales will encourage microhabitats, beneficial insects, infiltration, transpiration, and evaporation to better showcase stormwater retention techniques. Other possible sites include Evergreen Pond and North Star Park.

Project Location:	
Latitude:	38.55
Longitude:	121.75
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Various locations throughout the City.
County:	Yolo
City/Community:	Davis
Watershed:	Covell Drain
Groundwater Basin:	Yolo Subbasin
Planning Area:	Yolo County
Additional Comments:	None
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input checked="" type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	Spring 2019

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Goals include #2, 7, 9 and 11.
Objective(s) that the Project will help accomplish:	Objectives include #2,14, 17, and 19.

<p>Explanation of Project linkage to goals and objectives</p>	<p>By installing the project, the City will provide enhanced water quality for existing drainage within the area of the project. Some impervious surfacing will be converted to pervious surfacing, slowing drainage over this surfacing. This will increase overall evapotranspiration and ground water recharge over what currently occurs. Conversion to bioswales will encourage microhabitats.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Visual monitoring of the discharge from the sites during rain events. Visual monitoring triggers whether or not sampling is necessary in accordance with the Permit. Ultimately a combination of both recording visual monitoring and sampling would be how the project would be measured if developed.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	N/A
Urban Water Use Efficiency	May help with aquifer recharge. Impact otherwise unknown and likely small.
Improve Operational Efficiency and Transfers	
Conveyance---Delta	Negligible impact.
Conveyance --- Regional / local	Some minor local impact as some additional water may be infiltrated or evapotranspired.
System Reoperation	N/A
Water Transfers	N/A
Increase Water Supply	
Conjunctive Management & Groundwater	Some unknown but minor amount of ground water recharge.
Desalination	N/A
Precipitation Enhancement	N/A
Recycled Municipal Water	N/A
SurfaceStorage-----CALFED	N/A

Surface Storage ----- Regional / Local	N/A
Improve Water Quality	
Drinking Water Treatment and Distribution	N/A
Groundwater and Aquifer Remediation	Unknown but likely insignificant.
Matching Water Quality to Use	Improved water quality for the uses that drain into this facility.
Pollution Prevention	Some improvement of receiving water quality by filtering pollutants.
Salt and Salinity Management	N/A
Urban Runoff Management	Some improvement of urban runoff quality and reduced quantity due to improved evapotranspiration.
Practice Resources Stewardship	
Agricultural Lands Stewardship	N/A
Economic Incentives (Loans, Grants, and Water Pricing)	N/A
Ecosystem Restoration	Some minor improvement for downstream enhancement for habitat quality due to improved water quality.
Forest Management	N/A
Land Use Planning and Management	N/A
Recharge Areas Protection	N/A
Water---dependent Recreation	Will aid in improving water quality for downstream beneficial uses such as recreation.
Watershed Management	Will aid in improving overall water quality, habitat enhancement and reduced runoff if developed within the watershed.
Improve Flood Management	
Flood Risk Management	Minor reduction in flood risk.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>	May have some benefit to underground aquifer recharge if developed.	Unknown

Improve Water Quality		Dependent upon sites identified the survey.	Unknown amount
Groundwater Improvements		Unknown	Unknown
Water Conservation and Reuse		N/A	N/A

Watershed Rehabilitation	<input type="checkbox"/>	Some impact to watershed rehabilitation by improved water quality within the watershed.	Unknown amount.
	<input type="checkbox"/>		
Habitat Improvements		Improves habitat both locally and downstream by improving water quality.	Unknown amount.
Flood Management		Minor impact in creating additional opportunity for stormwater runoff to evoptranspire.	Unknown amount.

Other Benefits:

Likely to improve aesthetic quality of the project area. Education to the public on pollution prevention and stormwater runoff awareness. Encourage microhabitats and beneficial insects.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	During construction some local impacts related to construction noise and potential to contribute pollutants from the site to the SW system.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	Some benefit to Plains and Bay Miwok tribal communities that live in the Sacramento River and Bay Delta Region downstream of the project site.
c. If applicable, describe	None known.

benefits or impacts of the project with respect to Disadvantaged Communities*.	
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	None known.
e. If applicable, describe how the project assists the region in adapting to effects of climate change.	None known.
f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.	None known.

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions Contribute to
- attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning

- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve long
- Term reduction of water use Efficient
- Groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving

watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	Estimate of \$40,000 for site survey and initial project design	
2. Annual Operations and Maintenance (O&M)	Unknown, but unlikely to be a significant increase in current costs.	
b. List secured source(s) of funding	Source(s)	Amount
	None.	

c. List proposed source(s) of funding and certainty of the sources.	Some combination of General and Enterprise funds are likely sources.	Required matching amount would be provided.
d. For capital projects, explain how operation and maintenance costs will be financed.	The sites and facilities are already maintained. Additional costs for O & M are anticipated to be small if development occurs.	
e. Basis for project cost	Similar site surveys	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Site survey would be the initial step and projects would be developed from the results of the survey.	Spring 2018	Spring 2019
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>None</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>UWMP, Stormwater Plan</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>None</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

The project would allow for greater infiltration of stormwater in greenbelts and parks reducing stormwater run-off to downstream sources. Reduced pollutant load to receiving waters via increased infiltration, transpiration and evaporation.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	By installing the project, the City will provide enhanced water quality for existing drainage within the area of the project.	Feasibility study to determine options and quantification measures.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Reduced risk of localized flooding near bike paths in greenbelts.	Feasibility study to determine options and quantification measures.
Environmental – Environmental and habitat protection and improvement	X	Potential for increasing microhabitats for beneficial insects and urban wildlife.	Feasibility study to determine options and quantification measures.
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education	X	Likely to improve aesthetic quality of the project area. Education to the public on pollution prevention and stormwater runoff awareness.	Feasibility study to determine options and quantification measures.

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation	X	Potential reduction in water needed for nearby landscaping.	Feasibility study to determine options and quantification measures.
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Davis
Name of Primary Contact	Brian Mickelson
Mailing Address	1717 Fifth Street Davis, CA 95616
E--mail	bmickelson@cityofdavis.org
Phone (###)###-####	(530)757-5883
Other Cooperating Agencies/Organizations	None
Is your agency committed to the project through completion? If not, please explain	The City is committed to looking at the feasibility of stormwater measures city-wide which could include opportunities to convert hardscape to pervious pavement.

II. General Project Information

Project Title	Site Survey for Hardscape Conversion to Pervious Pavement
Project Description (Briefly describe the project, in 300 words or less,)	Survey public parking lots that currently have impervious surfacing to assess the practicality of converting these locations to pervious pavement when they are in need of resurfacing, maintenance or redesign. Portions of the pathways near the sites could potentially highlight permeable pavers in addition to the parking lots. Projects could be planned with improvements to incorporate bioswales, low water use plants, and other low-impact design measures into any landscape changes at the site. The projects would include signage on stormwater techniques implemented and information about water quality.

Project Location:	
Latitude:	38.55
Longitude:	121.75
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Various locations throughout the City.
County:	Yolo
City/Community:	Davis
Watershed:	Covell Drain
Groundwater Basin:	Yolo Subbasin
Planning Area:	Yolo County
Additional Comments:	None
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input checked="" type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	Spring 2019

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Goals include #2, 7, 9 and 11.
Objective(s) that the Project will help accomplish:	Objectives include #2,14, 17, and 19.

<p>Explanation of Project linkage to goals and objectives</p>	<p>By installing the project, the City will provide enhanced water quality for existing drainage within the area of the project. Some impervious surfacing will be converted to pervious surfacing, slowing drainage over this surfacing. This will increase overall evapotranspiration and ground water recharge over what currently occurs.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Visual monitoring of the discharge from the sites during rain events. Visual monitoring triggers whether or not sampling is necessary in accordance with the Permit. Ultimately a combination of both recording visual monitoring and sampling would be how the project would be measured if developed.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

<p>Reduce Water Demand</p>	
<p>Agricultural Water Use Efficiency</p>	<p>N/A</p>
<p>Urban Water Use Efficiency</p>	<p>May help with aquifer recharge. Impact otherwise unknown and likely small.</p>
<p>Improve Operational Efficiency and Transfers</p>	
<p>Conveyance--- Delta</p>	<p>Negligible impact.</p>
<p>Conveyance --- Regional / local</p>	<p>Some minor local impact as some additional water may be infiltrated or evapotranspired.</p>
<p>System Reoperation</p>	<p>N/A</p>
<p>Water Transfers</p>	<p>N/A</p>
<p>Increase Water Supply</p>	
<p>Conjunctive Management & Groundwater</p>	<p>Some unknown but minor amount of ground water recharge.</p>
<p>Desalination</p>	<p>N/A</p>
<p>Precipitation Enhancement</p>	<p>N/A</p>
<p>Recycled Municipal Water</p>	<p>N/A</p>
<p>SurfaceStorage-----CALFED</p>	<p>N/A</p>

Surface Storage ----- Regional / Local	N/A
Improve Water Quality	
Drinking Water Treatment and Distribution	N/A
Groundwater and Aquifer Remediation	Unknown but likely insignificant.
Matching Water Quality to Use	Improved water quality for the uses that drain into this facility.
Pollution Prevention	Some improvement of receiving water quality by filtering pollutants.
Salt and Salinity Management	N/A
Urban Runoff Management	Some improvement of urban runoff quality and reduced quantity due to improved evoptranspiration.
Practice Resources Stewardship	
Agricultural Lands Stewardship	N/A
Economic Incentives (Loans, Grants, and Water Pricing)	N/A
Ecosystem Restoration	Some minor improvement for downstream enhancement for habitat quality due to improved water quality.
Forest Management	N/A
Land Use Planning and Management	N/A
Recharge Areas Protection	N/A
Water---dependent Recreation	Will aid in improving water quality for downstream beneficial uses such as recreation.
Watershed Management	Will aid in improving overall water quality, habitat enhancement and reduced runoff if developed within the watershed.
Improve Flood Management	
Flood Risk Management	Minor reduction in flood risk.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>	May have some benefit to underground aquifer recharge if developed.	Unknown

Improve Water Quality		Dependent upon sites identified the survey.	Unknown amount
Groundwater Improvements		Unknown	Unknown
Water Conservation and Reuse		N/A	N/A

Watershed Rehabilitation	<input type="checkbox"/>	Some impact to watershed rehabilitation by improved water quality within the watershed.	Unknown amount.
Habitat Improvements		Improves habitat both locally and downstream by improving water quality.	Unknown amount.
Flood Management		Minor impact in creating additional opportunity for stormwater runoff to evoptranspire.	Unknown amount.

Other Benefits:

Likely to improve aesthetic quality of the project area. Education to the public on pollution prevention and stormwater runoff awareness. Provides a model for LID and the use of pervious surfaces.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	During construction some local impacts related to construction noise and potential to contribute pollutants from the site to the SW system.
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	Some benefit to Plains and Bay Miwok tribal communities that live in the Sacramento River and Bay Delta Region downstream of the project site.
c. If applicable, describe	None known.

benefits or impacts of the project with respect to Disadvantaged Communities*.	
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	None known.
e. If applicable, describe how the project assists the region in adapting to effects of climate change.	None known.
f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.	None known.

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions Contribute to
- attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning

- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve long
- Term reduction of water use Efficient
- Groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving

watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	Estimate of \$40,000 for site survey and initial project design	
2. Annual Operations and Maintenance (O&M)	Unknown, but unlikely to be a significant increase in current costs.	
b. List secured source(s) of funding	Source(s)	Amount
	None.	

c. List proposed source(s) of funding and certainty of the sources.	Some combination of General and Enterprise funds are likely sources.	Required matching amount would be provided.
d. For capital projects, explain how operation and maintenance costs will be financed.	The sites and facilities are already maintained. Additional costs for O & M are anticipated to be small if development occurs.	
e. Basis for project cost	Similar site surveys	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Site survey would be	Spring 2018	Spring 2019
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>None</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>UWMP, Stormwater Plan</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>None</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

By installing the project, the City will provide enhanced water quality for existing drainage within the area of the project. Some impervious surfacing will be converted to pervious surfacing, slowing drainage over this surfacing. This will increase overall evapotranspiration and ground water recharge over what currently occurs.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	By installing the project, the City will provide enhanced water quality for existing drainage within the area of the project. Some impervious surfacing will be converted to pervious surfacing, slowing drainage over this surfacing. This will increase overall evapotranspiration and ground water recharge over what currently occurs.	Feasibility study to determine options and quantification measures.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Reduced risk of localized flooding when flows are infiltrated using pervious pavement.	Feasibility study to determine options and quantification measures.
Environmental – Environmental and habitat protection and improvement	X	Potential for increased habitat by incorporating LID principles into nearby landscape design.	Feasibility study to determine options and quantification measures.
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education	X	Likely to improve aesthetic quality of the project area. Education to the public on pollution prevention and stormwater runoff awareness. Provides a model for LID and the use of pervious surfaces.	Feasibility study to determine options and quantification measures.

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph	X	The sites would allow water to naturally infiltrate into the ground by using pervious pavement.	Feasibility study to determine options and quantification measures.
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Solano County Water Agency
Name of Primary Contact	Rich Marovich
Mailing Address	810 Vaca Valley Parkway, Suite 203, Vacaville, CA 95688
E--mail	rmarovich@scwa2.com
Phone (###)###-####	(530) 902-1794
Other Cooperating Agencies/Organizations	Putah Creek Trout; Putah Creek Council
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Thompson Canyon Stormwater Management
Project Description (Briefly describe the project, in 300 words or less,)	Thompson Canyon is the first tributary from the north to Lower Putah Creek downstream of Monticello Dam. It was the main source of sediment loading into Lower Putah Creek in the highest storm runoff event in the history of the Solano Project (1983). Even in average rainfall years, sediment from Thompson Canyon has buried the best trout spawning site in the Interdam Reach. The lower mile of the canyon has a legacy dirt road that contributed to catastrophic hillslope failure. The road has thirty stream crossings without properly sized culverts or rock fords and is not properly outsloped for drainage. This project would repair the stream crossings, properly outslope the road and apply gravel surface. It would also install rock vanes for grade control in the channel.

Project Location:	Thompson Canyon from the mouth of the creek to one mile upstream.
Latitude:	38.519793°
Longitude:	-122.099305°
Can you provide a map of the project location including boundaries upon request?	X Yes N/A No
Project Location Description:	First tributary from the north to Lower Putah Creek downstream of Monticello Dam
County:	Yolo
City/Community:	Winters
Watershed:	Lower Putah Creek
Groundwater Basin:	Solano Sub-Basin
Planning Area:	Lower Putah Creek Watershed Management Action Plan
Additional Comments:	
Project Status (Check only one)	Conceptual Planning CEQA/NEPA Permitting Design x Construction/Implementation Study/Other Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	07/01/18

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Ensure high quality surface water; Enhance, improve, and maintain aquatic and riparian ecosystems; Provide superior water-related recreational opportunities (fishing)
Objective(s) that the Project will help accomplish:	Enhance the aquatic and riparian environment

<p>Explanation of Project linkage to goals and objectives</p>	<p>By reducing sediment loading from Thompson Canyon, we will protect the best trout spawning habitat, increase trout populations and improving recreational fishing. We will also reduce the siltation of Lake Solano which has lost half of its original volume. It will protect the ecosystem of the seven mile Interdam Reach and reduce threat of inundating the power plant at Monticello Dam.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Reduction of sediment loading at the mouth of Thompson Canyon will be measured by creating a transect with monuments to measure and record channel cross sections and by visual inspection of spawning beds.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	Restore ecosystem services (trout fishing)
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	protect benthic habitat from siltation
Improve Flood Management	
Flood Risk Management	

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>		
Improve Water Quality	<input checked="" type="checkbox"/>	Reduced sediment loading	one mile of channel enhanced
Groundwater Improvements	<input type="checkbox"/>		
Water Conservation and Reuse	<input type="checkbox"/>		

Watershed Rehabilitation	<input type="checkbox"/>	systemic benefit from reduced sediment loading	bathymetry surveys of Lake Solano
Habitat Improvements	<input type="checkbox"/>	Improved spawning habitat	Square feet of trout spawning habitat protected
Flood Management	<input type="checkbox"/>		

Other Benefits:

The Interdam Reach was recently designated by DFW as a Wild Trout Stream. Trout are no longer stocked and naturally spawned fish are gradually recovering but populations are limited by spawning habitat, the best of which is at the mouth of Thompson Canyon. Over 100,000 visitors use the five fishing accesses annually for catch and release of trophy fish. With enhanced spawning fishing restrictions could be relaxed to allow a sustainable level of take.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	temporary closure of legacy road for improvements
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	no direct benefits or impacts
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	possible benefit to disadvantaged communities who depend on fishing to feed their families.
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	not applicable

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>Resilience to the increased frequency and intensity of high rainfall events; protection of essential fish habitat</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>Some improvement in carbon sequestration through incorporation of organic material in infiltration strips and better growth of native vegetation from enhanced groundwater supplies in the vicinity of the dry creek bed in the summer months.</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	\$500,000	
2. Annual Operations and Maintenance (O&M)	\$10,000	
b. List secured source(s) of funding	Source(s)	Amount
	Thompson Canyon	\$10,000 annually

c. List proposed source(s) of funding and certainty of the sources.		
d. For capital projects, explain how operation and maintenance costs will be financed.		
e. Basis for project cost	Road Engineer Survey	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual		2009	2009
b. Planning		2009	2009
c. Environmental Documentation (CEQA/NEPA)		2018	2018
d. Permitting		2018	2018
e. Tribal Consultation		2018	2018
f. Design		2018	2018
g. Construction/Implementation		2019	2019

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>Lower Putah Creek Watershed Management Action Plan</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Thompson Canyon Stormwater Management

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

a. Is the project located on lands with Public ownership?

Yes No N/A

b. Have easements and/or all required land use agreements been obtained or are pending?

Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Reducing sediment loading from Thompson Canyon into Putah Creek will immediately benefit prime trout spawning habitat at the mouth of the tributary. This has been a priority of the nonprofit Putah Creek Trout since their inception.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	x	eliminate sediment loading at the source	1 river mile of restored creek channel and access road
Water Supply – Water supply reliability		In 2006 and 2008 peak sediment loading interrupted continuous processing of drinking water from the Solano Project	Lack of interruption of drinking water processing
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume			
Environmental – Environmental and habitat protection and improvement	x	Protection of trout spawning habitat	Increased fish populations measured by average time to catch a fish
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	x	reduced sediment loading	lower turbidity readings in the Interdam reach
Water Quality – Reestablished natural water drainage and treatment	x	infiltration strips capture more surface water and reduce runoff	infiltration rate
Water Supply – Water conservation	x	capture water for native plants through enhanced infiltration	10,000 square feet of native vegetation established
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas	x	Enhance fishing at 5 Putah Creek fishing accesses visited by 100,000 people per year	reduced time to catch a fish



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County FCWCD with Madison CSD
Name of Primary Contact	Kristin Sicke with Leo Resland
Mailing Address	34274 CA-16, Woodland, CA 95695
E--mail	ksicke@ycfcwcd.org
Phone (###)###-####	(530) 662-0265 ext. 112
Other Cooperating Agencies/Organizations	Potential partners include Yolo County
Is your agency committed to the project through completion? If not, please explain	Yes, pending funding availability

II. General Project Information

Project Title	Upstream Flow Management to Prevent Madison Flooding and to Facilitate GW Recharge
Project Description (Briefly describe the project, in 300 words or less,)	The District proposes to manage high flows from Lamb Valley, Cottonwood and S. Fork Willow Sloughs using the existing canal system as well as other means such as upstream check dams. During storm events Willow Slough floods the Town of Madison. The Canal system can be used to convey water away from the Town of Madison and reduce flood levels while also managing peak flows through use of check dams, particularly in Lamb Valley Slough. Flow and water level monitoring could serve several purposes. GW recharge can be accomplished through canal bottoms and potential recharge/detention basins. P. 29 and 30 of the 2012 FIS describe some of the upstream channel capacity limitations and a review of FIRM maps shows several points of intersection between the sloughs and canals to be explored. This project can be coordinated with Raising Highway 16 project.

Project Location:	Lamb Valley Slough, S. Fork Willow Slough and Cottonwood Sloughs in Yolo County
Latitude:	
Longitude:	
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Various locations in Lamb Valley, S. Fork Willow and Cottonwood Sloughs
County:	Yolo County
City/Community:	Unincorporated Yolo County
Watershed:	S. Fork Willow and Cottonwood Sloughs
Groundwater Basin:	Yolo Subbasin
Planning Area:	Valley Floor Area
Additional Comments:	
Project Status (Check only one)	<input checked="" type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input checked="" type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	2020

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	3. Improve understanding of watershed; 8. Promote reasonable use of water and watershed resources. 10. Provide reliable water supplies; 11. Reduce the risks of ...flooding;
Objective(s) that the Project will help accomplish:	14. Provide adequate flood protection; 15. Manage watershed activities to reduce large erosion events; 18. Maintain and enhance watershed monitoring, 23. Provide 100% reliability of M&I water supplies; 24. Provide ag water supplies

<p>Explanation of Project linkage to goals and objectives</p>	<p>Diverting from sloughs to canals can reduce downstream flooding and provide opportunities for GW recharge in canals and detention basins. Upstream check dams will provide opportunities to capture sediment and reduce erosion, reduce peak flows and flooding, and capture and recharge small storms.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>Diversions to canals and/or detention basins will be metered; depths of sediment at check dams can be measured.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	Metering of flows and Reduce sediment in canals
System Reoperation	Reoperates slough/canal system
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	Diversions enhance GW recharge for improved conjunctive management.
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	Detention basins create local surface

	storage
--	---------

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	Check dams and diversions optimize water management
Improve Flood Management	
Flood Risk Management	Diversions, and to lesser degree, check dams, reduce flood risk.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply		Diversions to recharge improve groundwater supply	To be determined in future phase
Improve Water Quality		Check dams capture sediment	To be determined in future phase
Groundwater Improvements	<input type="checkbox"/>	Recharge improves groundwater supply	To be determined in future phase (potential WEAP model analysis)
Water Conservation and Reuse			

Watershed Rehabilitation	<input type="checkbox"/> <input type="checkbox"/>		
Habitat Improvements	<input type="checkbox"/>		
Flood Management	<input type="checkbox"/>	Diversions may reduce flood risk	To be determined through updated flood modeling

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	Potential construction impacts may occur
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	If flood reductions result in fewer impacts to Highway 16, then Yoche Dehe Wintun tribe may benefit by protecting access to tribal property
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	Madison and some areas in the project area are DAC, therefore reduced flooding would benefit these areas
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	Improving flood conditions in the DAC located in the project area will address Environmental justice considerations.

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>Recharging groundwater with surface water and providing means of reducing flood peaks will assist in adapting to the climate change effects of reduced water supply and increased flooding</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>Groundwater recharge may result in higher groundwater levels which will require less pumping energy and therefore reduce GHG emissions for groundwater pumping.</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)	To be determined	
2. Annual Operations and Maintenance (O&M)	will potentially include sediment removal from check dams	
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.	State Grants	
d. For capital projects, explain how operation and maintenance costs will be financed.	To be determined	
e. Basis for project cost		
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Identify locations for gravity diversions from sloughs to canals and potential detention locations; evaluate flood and groundwater benefits	late 2017	
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>2006 Groundwater Management Plan (YCFCWCD), Agricultural Water Management Plan 2015 (YCFCWCD)</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>1999 Madison Flood Study 2000 Yolo County: Evaluation of Flood Control Alternatives in Yolo County 2012 Flood Insurance Study and FIRM maps 1996 Willow slough Watershed Plan, 2012 Enhanced Canal Recharge Feasibility Report (YCFCWCD)</p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

Flow and water level monitoring stations on Lamb Valley slough, S. Fork Willow Slough and Cottonwood Slough would be helpful for flood warning and estimation of quantities available for diversion. This project can be coordinated with project to raise Highway 16.

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

The District proposes to manage high flows from Lamb Valley and S. Fork Willow Sloughs using the YCFC&WCD's existing canal system as well as other means such as check dams. During storm events Willow Slough floods the Town of Madison. The Canal system can be used to convey water away from the Town of Madison and reduce flood levels while also managing peak flows through use of check dams particularly in Lamb Valley Slough upstream of the confluence with S. Fork Willow Slough. P. 29 and 30 of the 2012 FIS describe some of the upstream channel capacity limitations. Some public lands may be used but land ownership will have to be confirmed during project development.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	Check dams could capture sediments	Measurement of sediment depth over time
Water Supply – Water supply reliability			
Water Supply – Conjunctive use	x	Canals provide recharge to the aquifer	Diversions to be metered
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	x	The project will reduce the volume of water flooding the Town of Madison	Estimates based on diversions and modeling can be made
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides	X	Potential increases to GW levels may reduce pumping	
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas	x	Diversion of flood flows may help prevent Highway 16 from flooding and protect access to Yoche Dehe Wintun tribal lands	Estimates based on diversions and modeling can be made



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County Flood Control and Water Conservation District
Name of Primary Contact	Kristin Sicke
Mailing Address	34274 State Highway 16
E--mail	ksicke@ycfcwcd.org
Phone (###)###-####	(530)662-0265
Other Cooperating Agencies/Organizations	Yolo Subbasin Groundwater Agency
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	West Adams Canal Renovation and China Slough Rehabilitation Project
Project Description (Briefly describe the project, in 300 words or less,)	Enlargement and improvement of the Yolo County Flood Control & Water Conservation District's (District) West Adams, East Adams, and Acacia Canal system, and rehabilitation and improvement of China Slough (a natural storm drainage channel). The District's canal system would need to be modernized to allow for a "demand" system and to ensure no spills. China Slough would need to be cleaned, an operating road constructed, and installation of about eight check structures. Improvements to the canals and slough would be implemented to convey 10,000 acre-feet of surface water per year through China Slough to farmers in the Yolo-Zamora region (~4,200 acres).

Project Location:	North end of District's Canal System and China Slough
Latitude:	38.721935
Longitude:	-121.872545
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	West and East Adams, and Acacia Canals; and China Slough
County:	Yolo
City/Community:	Yolo-Zamora
Watershed:	Cache Creek
Groundwater Basin:	Yolo Subbasin
Planning Area:	506. Colusa Basin and 509. Central Basin West
Additional Comments:	
Project Status (Check only one)	<input checked="" type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	01/01/2020

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Plan 3 (improve collective understanding of watershed characteristics & functions), 9 (protect & enhance habitat & biological diversity of native species), 10 (provide reliable water supplies), 11 (reduce the risks of disruptive natural disturbances), 12 (support improved regional water management), 13 (support sustainable economic activities)
Objective(s) that the Project will help accomplish:	Risk Management Focus Objective 14 and 15; Understand Watershed Function Focus Objective 17 and 18; Water Supply Focus Objective 24

Explanation of Project linkage to goals and objectives	Conveying surface water to Yolo-Zamora would protect the groundwater within the Yolo Subbasin and would slow subsidence within the area. The project provides opportunity for irrigation and environmental flows to be conveyed through the channels, and to provide increased storm water conveyance capacity for minimizing flooding within the Yolo-Zamora area.
How will the project be measured to ensure the goals and objectives are being fulfilled?	The Water Resources Information Database will be used to monitor groundwater levels and ensure they are not continuing a downward trend. Subsidence surveys will be conducted every other year (provided funding is available) The District will connect the automation and monitoring at through China slough to the existing SCADA system to ensure real-time management, and to keep track of flow attenuation.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	Reduces demand on groundwater supplies by providing surface water supplies.
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	Provides greater flexibility to ensure consistent regional conveyance.
System Reoperation	Provides greater flexibility for irrigation season operations.
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	Recharging groundwater by expanding unlined canal system length .
Desalination	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	Settling of pathogens, nutrients, and metals during delayed retention period.
Salt and Salinity Management	
Urban Runoff Management	Expands natural channels for increased runoff capacity and conveyance.
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water-dependent Recreation	
Watershed Management	Expand the surface water conveyance potential within the watershed.
Improve Flood Management	
Flood Risk Management	Reducing flooding by enhancing the natural conveyance channels to allow greater storm water capture and attenuation.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre-feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>	Increase available surface water to the Yolo-Zamora area	10,000 acre-feet to Yolo Zamora irrigators (all currently groundwater users)
Improve Water Quality	<input type="checkbox"/>		

Groundwater Improvements		Increased groundwater supply from storm water & irrigation-season retention	
Water Conservation and Reuse			

Watershed Rehabilitation	<input checked="" type="checkbox"/>	Increased storm water conveyance in China Slough	
Habitat Improvements			
Flood Management		Reduced peak discharge from storm events to region	Need to study peak storm flows in this region

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	The District and YSGA will consult with the Yocha Dehe Wintun Nation to determine the coordination necessary during selection of the project site and construction of the retention pond.
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	N/A

<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>N/A</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>With increased intensity, duration, and frequency of storm events the project will assist the area in capturing additional flow to reduce flooding impacts and to recharge the groundwater and increase groundwater supply within the region.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>N/A</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem

benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System interties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs	2003\$ (\$11,792,850); 2017\$ (15,671,929)	
1. Capital (2014 Dollars)	2017\$ (15,671,929)	
2. Annual Operations and Maintenance (O&M)		
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.		
d. For capital projects, explain how operation and maintenance costs will be financed.	Will be financed by the beneficiaries under an annexation process with YCFC&WCD	
e. Basis for project cost	YCFC&WCD/YZWD Conjunctive Water Use Feasibility Study (2003)	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual		July 2018	December 2018
b. Planning		January 2019	February 2019
c. Environmental Documentation (CEQA/NEPA)		April 2019	December 2019
d. Permitting		April 2019	December
e. Tribal Consultation		January 2019	on going
f. Design		February 2019	May 2019
g. Construction/Implementation		January 2020	January 2021

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

a. List water planning documents that specifically identify this project.	YCFCWCD/YZWD Conjunctive Water Use Feasibility Study
b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)	
c. List technical reports and studies supporting the feasibility of this project.	YCFCWCD/YZWD Conjunctive Water Use Feasibility Study
d. If you are an Urban Water Supplier:	
1. Have you completed an Urban Water Management Plan and submitted to DWR?	Yes No <input checked="" type="checkbox"/> N/A
2. Are you in compliance with AB1420?	Yes No <input checked="" type="checkbox"/> N/A
3. Do you comply with the water meter requirements (CWC §525)	<input type="checkbox"/> Yes No <input checked="" type="checkbox"/> N/A
4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding	Yes No <input checked="" type="checkbox"/> N/A
e. If you are an Agricultural Water Supplier:	
1. Have you completed and submitted an AWMP (due 12/31/12)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
2. If not, will you complete and submit an AWMP prior to receiving project funding?	Yes No N/A
f. If the project is related to groundwater:	
1. Has a GWMP been completed and submitted for the subject basin?	<input checked="" type="checkbox"/> Yes No N/A
2. If not will a GWMP be completed within 1 year of the grant submittal date?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

West Adams Canal Renovation and China Slough Rehabilitation Project

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Provides increased stormwater conveyance capacity for minimizing flooding within the Yolo-Zamora area by improving drainage canals and China Slough (natural drainage).

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff			
Water Supply – Water supply reliability	X	Increases water supply availability and reliability to Yolo-Zamora area; and reduces dependence on groundwater	10,000 acre-feet
Water Supply – Conjunctive use	X	Preserves groundwater supplies by providing available surface water supplies	10,000 acre-feet increased surface water; 10,000 AF decreased groundwater use
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Reduced peak discharge from storm events to region	Need to study peak storm flows in this region
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides	X	Reduced groundwater pumping, increasing groundwater levels -- reduces GHG	
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	City of Davis
Name of Primary Contact	John Mc Nerney
Mailing Address	1717 Fifth Street Davis, CA 95616
E---mail	jmcnerney@cityofdavis.org
Phone (###)###-####	(530)757-5680
Other Cooperating Agencies/Organizations	None
Is your agency committed to the project through completion? If not, please explain	Not as of yet. The City is searching for sources of funding to determine feasibility and then implementation based upon assurance of an obtainable and economical goal.

II. General Project Information

Project Title	West Area Pond Redesign
Project Description (Briefly describe the project, in 300 words or less,)	Redesign the West Area Pond (detention basin) to utilize agricultural summer flows to enhance aquatic wildlife habitat and improve water quality. This proposal involves redirecting existing agricultural runoff through the Stonegate drainage pond and pumping it into the West Area Pond. This would enhance aquatic habitat while improving any water discharges through retention, enhancing opportunities for infiltration, transpiration and evaporation.

Project Location:	
Latitude:	38.55
Longitude:	121.73
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Citywide, but primarily in the northern majority of the City.
County:	Yolo
City/Community:	Davis
Watershed:	Covell Drain
Groundwater Basin:	Yolo Subbasin
Planning Area:	Yolo County
Additional Comments:	None
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input checked="" type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	Fall/Winter 2018

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Goals include #7, 9 and 11.
Objective(s) that the Project will help accomplish:	Objectives include #3, 6, 14, 17, and 19.

Explanation of Project linkage to goals and objectives	A feasibility study will provide determination if the existing agricultural runoff through Stonegate could be used to enhance aquatic habitat and improve stormwater quality for west area pond. The project will enhance quality of habitat and aesthetic value of each facility and aid in downstream flood management. Any improvement of water quality to receiving water facilitates meeting the requirements of the City's Permit. Goals 7, 9, and 11. Objectives 6, 14, 17 and 19. This project will also be considered for recycled water as an option for summer flows in the drainage channel.
How will the project be measured to ensure the goals and objectives are being fulfilled?	Visual monitoring of the discharge from the channels during storm events already occurs. Visual monitoring triggers whether or not sampling is necessary in accordance with the Permit. Ultimately a combination of both recording visual monitoring and sampling would be how the project would be measured if developed.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	N/A
Urban Water Use Efficiency	May help with aquifer recharge. Impact otherwise unknown and likely small.
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	Negligible impact.
Conveyance --- Regional / local	Some minor local impact as some additional water may be infiltrated or evapotranspired.
System Reoperation	N/A
Water Transfers	N/A
Increase Water Supply	
Conjunctive Management & Groundwater	Unknown
Desalination	N/A
Precipitation Enhancement	N/A
Recycled Municipal Water	N/A
Surface Storage ----- CALFED	N/A

Surface Storage ----- Regional / Local	N/A
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Improve Water Quality	
Drinking Water Treatment and Distribution	N/A
Groundwater and Aquifer Remediation	Unknown
Matching Water Quality to Use	Improved water quality for the urban uses that drain into these facilities.
Pollution Prevention	Some improvement of receiving water quality by capturing pollutants.
Salt and Salinity Management	N/A
Urban Runoff Management	Some improvement of urban runoff quality and reduced quantity due to improved evapotranspiration.
Practice Resources Stewardship	
Agricultural Lands Stewardship	N/A
Economic Incentives (Loans, Grants, and Water Pricing)	N/A
Ecosystem Restoration	Some local and downstream enhancement for habitat quality.
Forest Management	N/A
Land Use Planning and Management	N/A
Recharge Areas Protection	N/A
Water---dependent Recreation	Will aid in improving water quality for downstream beneficial uses such as recreation.
Watershed Management	Will aid in improving overall water quality, habitat enhancement and reduced runoff if developed within the watershed.
Improve Flood Management	
Flood Risk Management	Minor reduction in flood risk due to increased evapotranspiration.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>	May have some benefit to underground aquifer recharge if developed.	Unknown

Improve Water Quality		Improve quality by retaining the water on-site to allow for infiltration, transpiration and evaporation.	Unknown amount
Groundwater Improvements		Unknown	Unknown
Water Conservation and Reuse	✓	Potential reduction in potable water usage if potable water was needed to supplement flows not provided through agricultural run-off or recycled water.	N/A

Watershed Rehabilitation	<input checked="" type="checkbox"/>	Some impact to watershed rehabilitation by improved water quality within the watershed.	Unknown amount.
Habitat Improvements		Improves habitat both locally and downstream by improving water quality and enhanced native vegetation.	Unknown amount.
Flood Management		Minor impact in creating additional opportunity for stormwater runoff to evoptranspire.	Unknown amount.

Other Benefits:

Likely to improve aesthetic quality of the project area.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	No expected impacts from the feasibility study.
--	---

<p>b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.</p>	<p>Some benefit to Plains and Bay Miwok tribal communities that live in the Sacramento River and Bay Delta Region downstream of the project site.</p>
<p>c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.</p>	<p>None known.</p>
<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>None known.</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>None known.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>None known.</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR

- Effectively resolve significant water-related conflicts within or between regions Contribute
- to attainment of one or more of the objectives of the CALFED Bay-Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use Efficient
- groundwater basin management
- system interties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re-establish river floodplain hydrologic continuity, re-introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat

water

- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi--benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs	
1. Capital (2014 Dollars)	100,000 for feasibility study
2. Annual Operations and Maintenance (O&M)	None anticipated, but if project is developed, then O & M costs would be determined in the study.
b. List secured source(s) of funding	Source(s)
	Amount
	None.

c. List proposed source(s) of funding and certainty of the sources.	City Enterprise funds are likely source. Uncertain if funding would be allocated at this time.	Required matching amount would be
d. For capital projects, explain how operation and maintenance costs will be financed.	The sites and facilities are already maintained. Additional costs for O & M are anticipated to be small if development occurs.	
e. Basis for project cost	Estimates based upon prior experience.	
f. Can a detailed cost estimate be provided upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Feasibility Study	Winter 2018	Summer 2019
b. Planning			
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			

e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

a. List water planning documents that specifically identify this project.	None
b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)	None <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
c. List technical reports and studies supporting the feasibility of this project.	None <input type="checkbox"/> <input type="checkbox"/>
d. If you are an Urban Water Supplier:	
1. Have you completed an Urban Water Management Plan and submitted to DWR?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
2. Are you in compliance with AB1420?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Do you comply with the water meter requirements (CWC §525)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
e. If you are an Agricultural Water Supplier:	
1. Have you completed and submitted an AWMP (due 12/31/12)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2. If not, will you complete and submit an AWMP prior to receiving project funding?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
f. If the project is related to groundwater:	

<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	Yes	No	<input checked="" type="checkbox"/> N/A
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	Yes	No	<input checked="" type="checkbox"/> N/A

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@yfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

This project would redirect agricultural flows to enhance aquatic wildlife habitat and improve water quality downstream by allowing for increased retention and infiltration times.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	Improve water quality by allowing for longer retention and infiltration times.	Feasibility study to determine options and quantification measures.
Water Supply – Water supply reliability	X	Increased reliability of water supply to the West Area Pond (detention basin) to provide flows for aquatic wildlife habitat.	Feasibility study to determine options and quantification measures.
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Reduced risk of localized flooding if the flows can be directed to the West Area Pond.	Feasibility study to determine options and quantification measures.
Environmental – Environmental and habitat protection and improvement	X	Improve aquatic wildlife habitat.	Feasibility study to determine options and quantification measures.
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control	X	Potential to decrease nonpoint source pollutants from nearby rural areas from entering downstream water bodies.	Feasibility study to determine options and quantification measures.
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Solano County Water Agency
Name of Primary Contact	Rich Marovich
Mailing Address	810 Vaca Valley Parkway, Suite 203 Vacaville, California 95688
E-mail	rmarovich@scwa2.com
Phone (###)###-####	(530) 902-1794
Other Cooperating Agencies/Organizations	City of Winters, Putah Creek Council
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Winters Bioswales Project and Habitat Enhancement
Project Description (Briefly describe the project, in 300 words or less,)	<p>Stormwater from the town of Winters drains residential areas, business districts, and undeveloped lands into a culvert system that delivers contaminated runoff to Putah Creek and one of its major tributaries, Dry Creek. Eighteen discharge points exist, eight of which are connected directly to Putah Creek, the remaining to Dry Creek. Three main culvert delivery sites occur within the Winters Putah Creek Nature Park (WPCNP), draining approximately 200 acres of impervious lands. The stormwater network drains streets, parking lots, businesses and suburban lots, over-irrigated landscapes and disturbed lands, carrying sediment, petroleum products, fertilizers, pesticides, and bacteria into Putah Creek.</p> <p>We have assembled numerous stakeholders to begin addressing this water quality issue and are developing seasonal wetland (bioswale)</p>

	<p>water treatment projects within the WPCNP that will improve water quality, enhance floodplain function, restore wildlife habitat, and provide educational opportunities for the Winters community.</p> <p>By redirecting this stormwater runoff onto newly constructed floodplains of Putah Creek, water quality contaminants can be decreased through the breakdown action of sunlight, soil, plant roots and microorganisms. Moreover, the redirected water can assist in rehydrating portions of the floodplain during periods of drought and enhance riparian plant growth for the benefit of corridor wildlife. Each culvert outlet, along with the receiving floodplain landscape requires novel designs to redirect, capture, and infiltrate stormwater, all involving site-specific earthworks, specialized soil treatments, appropriate vegetation, monitoring, and post-installation management. We are conducting feasibility analyses and developing designs for the three major culvert networks within the park. We anticipate moving forward with implementation of our first site in Summer, 2018. Along with stormwater treatment and creekside improvements, we intend to develop a community outreach component that will educate people on “Upper Watershed” creek care within the suburban areas that comprise the stormwater drainage networks.</p>
Project Location:	Three main Outflows within Putah Creek Nature Park
Latitude:	38°31'18.24"N
Longitude:	121°57'54.14"W
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	The three project sites are located within Winters Putah Creek Park in the City of Winters.
County:	Yolo
City/Community:	Winters
Watershed:	Putah Creek
Groundwater Basin:	Yolo Subbasin
Planning Area:	Central Basin West
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input checked="" type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	October 31, 2018

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found in Meeting #6 Handout 4 a/b at www.westsideirwm.com/meetings . If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Creation and restoration of wetlands, maximizes water quality and supply to restored riparian communities.
Objective(s) that the Project will help accomplish:	Restore native vegetation/form/function along riparian/aquatic corridors, Provide educational information to encourage stewardship by public, and Provide and promote use of educational curricula for K-12 students
Explanation of Project linkage to goals and objectives	The bioswales project takes previously untreated storm runoff and puts it in wetlands designed to remove pollutants. The water then be distributed to floodplains adjacent to Putah Creek where the water will be utilized by plantings along the creek, thus enhancing habitat along the creek. There is an additional educational component of the project that educate both K-12 and others about the importance of keeping pollutants out of storm drains and how bioswales function.
How will the project be measured to ensure the goals and objectives are being fulfilled?	The project includes rigorous soil testing for moisture content, sediment load, and plant community performance.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the

Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:
<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	Urban water will be used to benefit native vegetation .
Improve Operational Efficiency and Transfers	
Conveyance - Delta	
Conveyance - Regional / local	
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage -- CALFED	
Surface Storage -- Regional / Local	
Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	Pollutants will be removed from water before they enter Putah Creek/
Salt and Salinity Management	
Urban Runoff Management	
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	Water quality will be improved and habitat will be restored.
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water-dependent Recreation	
Watershed Management	
Improve Flood Management	
Flood Risk Management	

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre-feet of water supplied, acres of habitat restored)
Increase Water Supply	<input type="checkbox"/>	Water supply will be increased by re-routing water that presently goes directly into Putah Creek.	Treat soil substrates within the reconstructed flood plain so that they have 1) adequate infiltration to capture rainwater and 2) adequate retention to support plant growth. Infiltration will be measured by infiltrometer prior to flooding to assure soil function and by flow difference after flooding. Moisture retention will be measured by soil moisture release curve and logging soil moisture probes.
Improve Water Quality	<input type="checkbox"/>	The project has been designed to Remove pollutants from urban runoff.	Sediment have been chosen as a marker for other potential pollutants. Sediments will be measured at culverts and compared to water samples in the bioswales.
Groundwater Improvements	<input type="checkbox"/>		
Water Conservation and Reuse	<input type="checkbox"/>		
Watershed Rehabilitation	<input type="checkbox"/>		

Habitat Improvements	<input type="checkbox"/>	<p>1) Develop site-specific planting designs for seasonal wetland (bio-swale) locations to optimize stormwater treatment and floodplain function, restore native plants and wildlife habitat, and promote public interest in the project areas</p> <ul style="list-style-type: none"> <input type="checkbox"/> Select from 40 candidate herbaceous perennial and woody species to create <i>Desired Vegetation Assemblages</i> for individual sites (all species derived from the Putah Creek watershed) <input type="checkbox"/> Delineate planting zones based on soil and hydrologic conditions and stormwater treatment guidelines and put into GIS <input type="checkbox"/> Create wildlife habitat guilds to promote pollinators, butterflies, and riparian birds <input type="checkbox"/> Increase uncommon plants that have lost ground (due over 75 years of anthropogenic disturbance along the Putah Creek corridor) <input type="checkbox"/> Incorporate plants with ethnobotanical significance for tribal people and local Latino population 	<p>5 acres of habitat will be established and a monitoring plan has been developed to ensure that plantings are thriving.</p>
Flood Management	<input type="checkbox"/>		

Other Benefits:

<p>Provide stewardship opportunities, develop interpretive materials for “Creek Care”, create “upper watershed” demonstration sites, Promote stewardship opportunities for Putah Creek Council Stewardship Team members and Solano County Water Agency interns</p> <ul style="list-style-type: none"> <input type="checkbox"/> Create signage and narrative that describes integration of storm water treatment with floodplain enhancement, native plant restoration, and wildlife habitat improvement <input type="checkbox"/> Help develop educational program for improved “upper watershed” land care within suburban landscape (e.g., rainwater rerouting from hardscapes into permeable zones, emphasis of climate appropriate, habitat enhancing and water conserving landscaping, revegetation of

disturbed lands, and chemical use reduction

- Conduct organizational meetings and varied outreach activities to stakeholders

Cooperators and Stakeholders

- California Department of Fish and Wildlife
- California Department of Forestry and Fire Protection
- City of Winters
- Natural Resources Conservation Service
- Putah Creek Council and Stewardship Team
- Putah Creek landowners
- Putah Creek Science Review Committee members
- Solano County Water Agency
- Winters Putah Creek Nature Park Committee

Please provide a summary of the expected project benefits and impacts in the table below.

<p>a. Describe any expected impacts of the project</p>	
<p>b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.</p>	
<p>c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.</p>	
<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	

<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	
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*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR
- Effectively resolve significant water-related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies
- Achieve long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re-establish river-floodplain hydrologic continuity, re-introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2012 Dollars)	195,328.00	
2. Annual Operations and Maintenance (O&M)	5,000	
b. List secured source(s) of funding	Source(s)	Amount
	Solano County Water	80,000.00
c. List proposed source(s) of funding and certainty of the sources.	Solano County Water Agency has proposed a cash	
d. For capital projects, explain how operation and maintenance costs will be financed.	Project will be maintained as part of the ongoing maintenance of the Winters Putah Creek Park restoration projects.	
e. Basis for project cost		
f. Can a detailed cost estimate be provided upon request?	X yes	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	This has been completed. The team has had several site visits NRCS staff engineers have assisted with design.		7/15/2017
b. Planning	This is well along a plant species list has been developed. More flow data will be collected this year.	Ongoing	7/15/2018
c. Environmental Documentation (CEQA/NEPA)	This project is covered by existing CEQA documents		
d. Permitting	This project is covered by existing permits		
e. Tribal Consultation	This project will not require tribal consultation- This has been		

	completed.		
f. Design	Project design will be completed when flow data from 2017-2018 season is collected and soils data is analyzed.	6/1/2018	2/30/2018
g. Construction/Implementation	Construction will be Completed after nesting birds are done	9/31/2018	10/15/2018

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

a. List water planning documents that specifically identify this project.	
b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)	
c. List technical reports and studies supporting the feasibility of this project.	<p>Bioswales are increasingly popular- following are two links to a NRCS document and a Soil Science Society of America document.</p> <p>https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_029251.pdf</p> <p>https://www.soils.org/discover-soils/soils-in-the-city/green-infrastructure/important-terms/rain-gardens-bioswales</p>

d. If you are an Urban Water Supplier:	
1. Have you completed an Urban Water Management Plan and submitted to DWR?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2. Are you in compliance with AB1420?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Do you comply with the water meter requirements (CWC §525)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4. If the answer to any of the questions above is “no”, do you intend to comply prior to receiving Project funding	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
e. If you are an Agricultural Water Supplier:	
1. Have you completed and submitted an AWMP (due 12/31/12)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2. If not, will you complete and submit an AWMP prior to receiving project funding?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
f. If the project is related to groundwater:	
1. Has a GWMP been completed and submitted for the subject basin?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2. If not will a GWMP be completed within 1 year of the grant submittal date?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Winters Bioswales Project and Habitat Enhancement

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Stormwater from the town of Winters drains residential areas, business districts, and undeveloped lands into a culvert system that delivers contaminated runoff to Putah Creek and one of its major tributaries, Dry Creek. Eighteen discharge points exist, eight of which are connected directly to Putah Creek, the remaining to Dry Creek. Three main culvert delivery sites occur within the Winters Putah Creek Nature Park (WPCNP), draining approximately 200 acres of impervious lands. The stormwater network drains streets, parking lots, businesses and suburban lots, over-irrigated landscapes and disturbed lands, carrying sediment, petroleum products, fertilizers, pesticides, and bacteria into Putah Creek.

We have assembled numerous stakeholders to begin addressing this water quality issue and are developing seasonal wetland (bioswale) water treatment projects within the WPCNP that will improve water quality, enhance floodplain function, restore wildlife habitat, and provide educational opportunities for the Winters community.

By redirecting this stormwater runoff onto newly constructed floodplains of Putah Creek, water quality contaminants can be decreased through the breakdown action of sunlight, soil, plant roots and microorganisms. Moreover, the redirected water can assist in rehydrating portions of the floodplain during periods of drought and enhance riparian plant growth for the benefit of corridor wildlife. Each culvert outlet, along with the receiving floodplain landscape requires novel designs to redirect, capture, and infiltrate stormwater, all involving site-specific earthworks, specialized soil treatments, appropriate vegetation, monitoring, and post-installation management. We are conducting feasibility analyses and developing designs for the three major culvert networks within the park. We anticipate moving forward with implementation of our first site in Summer, 2018. Along with stormwater treatment and creekside improvements, we intend to develop a community outreach component that will educate people on “Upper Watershed” creek care within the suburban areas that comprise the stormwater drainage networks.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water
Water Quality – Increased filtration and/or treatment of runoff	X	Constructing the bioswales the water that is presently entering the creek untreated will re-route it into treatment wetlands and then onto the flood plains associated with Putah Creek where it will provide much needed water to newly planted riparian habitat.	5 acres of habitat will be restored.
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume			
Environmental – Environmental and habitat protection and improvement	X	The culverts in Winters flow directly into Putah Creek with no treatment. This project will improve water quality and habitat improvement by removing sediments and other toxic materials from water before it enters the creek and will use the water to grow native species for habitat improvement adjacent to the creek.	5 acres will be restored.
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education	X	The grant includes a public education component and bioswale plantings will be performed by volunteers who will be educated about why they are important and how the function.	3 community tours and a 1 classroom component.

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre--feet of water supplied, acres of
Water Quality – Nonpoint source pollutant control	X	Stormwater currently discharged via 3 City outflows without any treatment will be treated through created bioswales	50% of all city stormwater will be filtered through these 3 bioswales and 5 acres of habitat will be restored
Water Quality – Reestablished natural water drainage and treatment	X	Bioswales will improve water quality through filtration	same as above
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements	X	The bioswales will capture water that is now flowing directly into Putah Creek. This water will be re-routed to be used by trees that shade Putah Creek and lower water temperature in the creek.	5 acres of habitat will be restored.
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas		The bioswales will be planted on Winters Putah Creek Park and will enhance the native vegetation planted at the park. Additionally, the bioswales will be planted with a range of native pollinator species that are quite attractive.	5 acres of habitat will be restored.



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County Flood Control and Water Conservation District
Name of Primary Contact	Kristin Sicke
Mailing Address	34274 State Highway 16
E--mail	ksicke@ycfcwcd.org
Phone (###)###-####	(530)662-0265
Other Cooperating Agencies/Organizations	City of Winters
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Winters North Area Stormwater Pond
Project Description (Briefly describe the project, in 300 words or less,)	Develop and construct a 5,000 acre-feet stormwater retention pond in the north area of Winters to reduce drainage and flood waters from the Chickahominy Slough. The retention pond would also be used for groundwater recharge in times when the capacity and water was available. The retention pond would provide water quality benefits by allowing the sediments in the runoff to settle and lessening the transfer of pollutants and chemicals downstream. The surrounding area would have native vegetation that would promote benefits for wildlife habitat, and the property would allow for groups to visit and learn about the multi-beneficial, multi-agency partnership. Similar to the District's Chapman Reservoir, we would install automated gates and monitoring devices at the retention pond that would be connected to the District's SCADA system for real-time management.

Project Location:	Not decided yet, but likely in the vicinity of the lat/long below.
Latitude:	38.602726
Longitude:	-122.013814
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Again, preliminary discussions have placed the project at the lat/long above, but we'd need to work with a landowner to obtain the proper easements and rights.
County:	Yolo
City/Community:	North of Winters (rural County area)
Watershed:	Chickahominy Slough (north of Putah Creek Watershed)
Groundwater Basin:	Yolo Subbasin
Planning Area:	509. Central Basin West
Additional Comments:	
Project Status (Check only one)	<input checked="" type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	01/01/2019

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Plan Goals 2 (improve education & awareness), 3 (improve collective understanding of watershed characteristics & functions), 4 (improve the form & function of degraded channels), 7 (preserve, improve & manage water quality), 9 (protect & enhance habitat & biological diversity of native species), 10 (provide reliable water supplies), 11 (reduce the risks of disruptive natural disturbances), 12 (support improved regional water management), 13 (support sustainable economic activities)
Objective(s) that the Project will help accomplish:	Education and Awareness Objective 2; Risk Management Focus Objective 14 and 15; Understand Watershed Function Focus Objective 17 and 18; Water Supply Focus Objective 24

Explanation of Project linkage to goals and objectives	The stormwater retention pond would improve the form and function of degraded channels by capturing the peak
How will the project be measured to ensure the goals and objectives are being fulfilled?	The District will connect the automation and monitoring at the retention pond to the existing SCADA system to ensure real-time management, and to keep track of retained flows and losses to groundwater. The District will keep a list of tours given throughout the year to track educational outreach and will coordinate with Winters to determine the extent of reduced flooding.

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance---Delta	
Conveyance --- Regional / local	Provides greater flexibility to ensure consistent regional conveyance.
System Reoperation	Provides greater flexibility for irrigation season operations.
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	Recharging groundwater by retaining water and allowing to percolate.
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage-----CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	Reduces pollutants and contaminants in delayed retention period.
Salt and Salinity Management	
Urban Runoff Management	Reduces extraneous runoff to City of Winter via urban channels.
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water-dependent Recreation	
Watershed Management	
Improve Flood Management	
Flood Risk Management	Reduces downstream flooding to north Winters.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:	Brief Explanation of Selected Benefits	Quantification (e.g. acre-feet of water supplied, acres of habitat restored)
Increase Water Supply	Groundwater recharge from stormwater & irrigation-season retention	Depends on the water year
Improve Water Quality	Settling of pathogens, nutrients, and metals during delayed retention period.	
Groundwater Improvements	Increased groundwater supply from stormwater & irrigation-season retention	Depends on the water year

Water Conservation and Reuse	<input checked="" type="checkbox"/>		Capture of stormwater for groundwater recharge & irrigation reuse
Watershed Rehabilitation	<input checked="" type="checkbox"/>	Improved channel erosion in Chick. Slough U/S & D/S of pond	Reduction in flows conveyed downstream of pond will improve channel erosion -- not sure how to quantify the benefit.
Habitat Improvements		Increased native vegetation & provide habitat improvements	
Flood Management		Reduced peak discharge from storm events to Winters	Peak flow estimated at 8,000 cfs; potential to capture 2,500 cfs during a 24-hour storm

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	The District and City of Winters will consult with the Yocha Dehe Wintun Nation to determine the coordination necessary during selection of the project site and construction of the retention pond.
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	The stormwater retention pond would reduced peak flows discharged through Chickahominy Slough, thereby reducing the discharge & flooding through Winters. Winters is considered an EDA

<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>N/A</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>With increased intensity, duration, and frequency of storm events the project will assist the area in capturing additional flow to reduce flooding impacts to Winters, and to recharge the groundwater and increase groundwater supply.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>N/A</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)		
2. Annual Operations and Maintenance (O&M)		
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.		
d. For capital projects, explain how operation and maintenance costs will be financed.		
e. Basis for project cost		
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual			
b. Planning		January 2018	
c. Environmental Documentation (CEQA/NEPA)		July 2018	
d. Permitting		July 2018	
e. Tribal Consultation		January 2018	
f. Design		April 2018	June 2018
g. Construction/Implementation		October 2018	

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is “no”, do you intend to comply prior to receiving Project funding</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Construction of a 5,000 acre-feet stormwater retention pond in the north area of Winters will reduce drainage and flood waters from the Chickahominy Slough, and provide an immediate downstream storm water benefit in north Winters.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	Settling of pathogens, nutrients, and metals during delayed retention period.	
Water Supply – Water supply reliability	X	Groundwater recharge from stormwater & irrigation-season retention	
Water Supply – Conjunctive use	X	Groundwater recharge from stormwater & irrigation-season retention	
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Increased groundwater supply from stormwater & irrigation-season retention	
Environmental – Environmental and habitat protection and improvement		Increased native vegetation & provide habitat improvements	
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education	X	Ideally this would be a place for people to come learn about integrated water management in Yolo County -- stormwater, groundwater recharge, and environmental habitat/benefits	

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment	X	Slowing of flows will result in reestablished natural water drainage and settling of solids in a retention pond	
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			

Yolo County Flood Control and Water Conservation District
Winters North Area Retention Pond
Quantitative Benefit Analysis
12/08/2017

This project would offer an opportunity to measure rainfall-runoff relationships and the effectiveness of this size of retention pond in attenuating flood peaks and retaining sediment. Automation and SCADA control would allow for real-time decision making in pond operation and would allow pond stage and outlet flows to be tracked and controlled during and following storm events. Additionally, given the right conditions and appropriate storage in the pond, groundwater percolation can be monitored and tracked to ensure groundwater recharge in the region. If successful, a similar pond could be constructed and installed to capture storm flows in the low-lying areas of Yolo County.

From Westside IRWMP and SWRP Project Forms:

- Capacity of North Winters Retention Pond: 5,000 ac-ft = 217,800,000 cu. ft.
- Peak flood flows = 8,000 cfs
- Capture flow = 2,500 cfs for 24-hour storm = 5,000 ac-ft



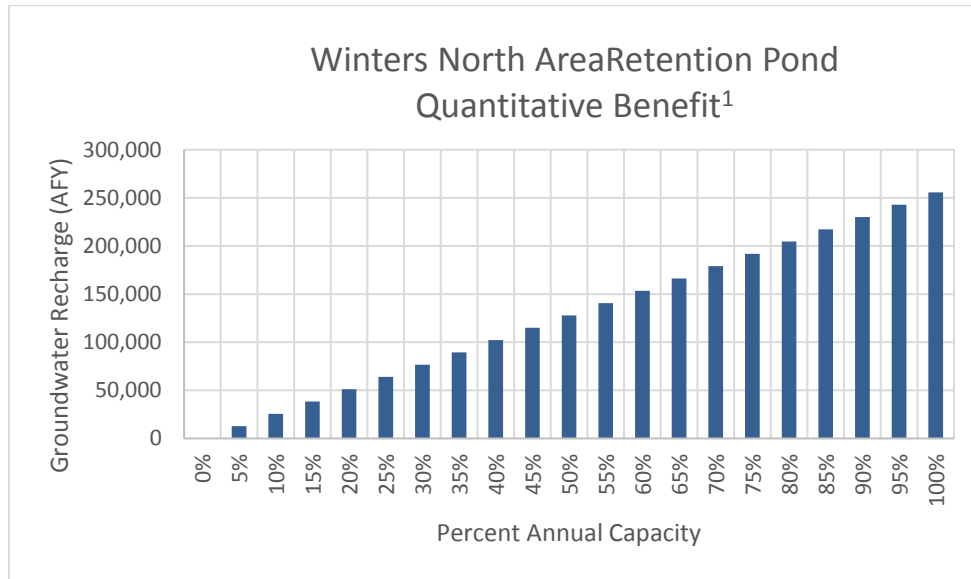
Assumptions:

- Retention Pond Depth¹ = 5 ft
 - Therefore, area of North Winters Retention Pond = 1,000 acres = 43,560,000 sq. ft.
 - Infiltration Rate²: 0.35 in/hr

¹ City of Davis Manual of Stormwater Quality Control Standards for New Development and Redevelopment, 2008: (<http://cityofdavis.org/home/showdocument?id=4477>)

² Yolo County Integrated Regional Water Management Plan, Background Data and Information Appendix. May 2005. (http://www.yolowra.org/tech_data_appendix/Chapter%203%20-%20Soils.pdf)

Yolo County Flood Control and Water Conservation District
Winters North Area Retention Pond
Quantitative Benefit Analysis
12/08/2017



Quantitative Benefits:

- Ability to capture 2,500 cfs during a 24-hour storm = 5,000 ac-ft
- Groundwater Recharge (100 percent annual capacity) = 255,675 ac-ft/yr
- Groundwater Recharge (50 percent annual capacity) = 127,838 ac-ft/yr
- Acres of enhanced aquatic habitat = 1,000 ac

Acres acquired from: Yolo County Flood Control and Water Conservation District



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Yolo County Flood Control and Water Conservation District
Name of Primary Contact	Kristin Sicke
Mailing Address	34274 State Highway 16
E--mail	ksicke@ycfcwcd.org
Phone (###)###-####	(530)662-0265
Other Cooperating Agencies/Organizations	Yolo County
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Yolo County Drains and Sloughs -- Governance and Maintenance Study
Project Description (Briefly describe the project, in 300 words or less,)	Plan that will identify governing bodies and maintenance responsibilities involved in the County's drains, canals, and sloughs. The District and County will work together to develop a governance and maintenance study that will assist in providing effective rural storm water management responsibilities based on the defined governing bodies. Plan/investigation will initiate a legitimate storm water management program in Yolo County.

Project Location:	Yolo County
Latitude:	
Longitude:	
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Plan for all of Yolo County
County:	Yolo
City/Community:	Yolo-Zamora
Watershed:	Cache Creek
Groundwater Basin:	Yolo Subbasin
Planning Area:	506. Colusa Basin and 509. Central Basin West
Additional Comments:	
Project Status (Check only one)	<input checked="" type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	01/01/2020

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Plan Goal 2 (improve education and awareness throughout the region about water, watershed functions, and ecosystems), 3 (improve collective understanding of watershed characteristics & functions), 4 (improve the form and function of degraded natural channels) 9 (protect & enhance habitat & biological diversity of native species), 10 (provide reliable water supplies), 11 (reduce the risks of disruptive natural disturbances), 12 (support improved regional water management), 13 (support sustainable economic activities)
Objective(s) that the Project will help accomplish:	Infrastructure Focus Objective 10; Risk Management Focus Objective 14 and 15; Understand Watershed Function Focus Objective 17 and 18

<p>Explanation of Project linkage to goals and objectives</p>	<p>Developing a Slough/Drain/Canal Responsibility and Maintenance Plan will initiate the process for developing a collective understanding of watershed characteristics. And will develop goals and objectives for improving the form and function of degraded natural channels to reduce the risk of flooding and reduce large erosion events. The Plan also have a component that will discuss asset management of the sloughs and drainage conveyance systems in the County. Improving slough function will result in better conjunctive management as storm flows will be conveyed better and can be retain to recharge the groundwater.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>The Goals and Objectives developed as part of the Plan will be compared to the Westside IRWM Plan Goals and Objectives, including the Yolo Storm Water Resources Plan Goals and Objectives. Ideally, in the future more monitoring stations would be deployed and connected to the Districts SCADA system to monitor and measure the storm water attenuation and slough function.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	Reduces demand on groundwater supplies by improving groundwater recharge potential.
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance --- Delta	
Conveyance --- Regional / local	Ensures appropriate conveyance of storm water flows for improved attenuation and reduced flooding.
System Reoperation	
Water Transfers	
Increase Water Supply	

Conjunctive Management & Groundwater	Recharging groundwater by improving slough function to increase recharge surface area.
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	Settling of pathogens, nutrients, and metals during delayed retention period.
Salt and Salinity Management	
Urban Runoff Management	Expands natural channels for increased runoff capacity and conveyance.
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	Ensures appropriate conveyance of storm water flows for improved attenuation and reduced flooding.
Improve Flood Management	
Flood Risk Management	Reducing flooding by enhancing the natural conveyance channels to allow greater storm water capture and attenuation.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply		Increases groundwater recharg	
Improve Water Quality			
Groundwater Improvements		Increased groundwater supply from storm water retention	
Water Conservation and Reuse			

Watershed Rehabilitation	<input checked="" type="checkbox"/>	Increased storm water conveyance in sloughs	
	<input type="checkbox"/>		
Habitat Improvements			
Flood Management		Improve conveyance and capture of flood events	

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	The District and County will involve the Yocha Dehe Wintun Nation in the planning process.

<p>c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.</p>	<p>May benefit town of Madison's storm water attenuation.</p>
<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>N/A</p>
<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>With increased intensity, duration, and frequency of storm events the project will assist the area in capturing additional flow to reduce flooding impacts and to recharge the groundwater and increase groundwater supply within the region.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>N/A</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions Contribute to
- attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region

- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve long term reduction of water use Efficient
- Groundwater basin management
- System inertias

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river--- floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency Reduce
- Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi--benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs	\$150,000	
1. Capital (2014 Dollars)		
2. Annual Operations and Maintenance (O&M)		
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.		
d. For capital projects, explain how operation and maintenance costs will be financed.		
e. Basis for project cost		
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual			
b. Planning		January 2019	December 2019
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			
g. Construction/Implementation			

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is “no”, do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>

Project Information Form

SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Yolo County Drains and Sloughs -- Governance and Maintenance Study

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Identifies responsible agencies and maintenance involved in sloughs and drains within Yolo County. Provides increased stormwater conveyance capacity for minimizing flooding within Yolo County by improving canals and natural drainage.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff			
Water Supply – Water supply reliability	X	Increases water supply availability and reliability by recharging groundwater	
Water Supply – Conjunctive use	X	Enhances groundwater supplies by increasing recharge surface area	
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Attenuate flows appropriately and reduce erosion from large storm events	
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education			

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Madison CSD
Name of Primary Contact	Leo Refsland
Mailing Address	P.O. Box 40
E-mail	leo@madisoncsd.org
Phone (###)###-####	(530)666-2888
Other Cooperating Agencies/Organizations	Yolo County FC&WCD and local landowners
Is your agency committed to the project through completion? If not, please explain	Yes, but it will also require landowner participation and follow-through.

II. General Project Information

Project Title	Madison Farmer Field Stormwater Capture and Groundwater Recharge
Project Description (Briefly describe the project, in 300 words or less,)	Modify farmer fields around Madison, specifically those next to Highway 16 and those that will capture upstream flows. The two options considered include 1) 1,200 acres of farmer field modification for rainfall capture (8"-berm) and 2) modification of a farmer field near Cache Creek (maybe half of APN 049-060-017) for rainfall and storm water runoff capture a 3-' high storm water detention basin. This project will require farmer participation and advanced planning for field modification, and will depend on the storm intensity. The first option will only capture rainfall and the second option will capture rainfall and allow runoff to be collected into the detention basin. The second option will require more modification to the property, additional infrastructure for channeling runoff into the basin, and a pump if the water needs to be drained from the basin.

Project Location:	Surrounding Madison CSD (See specific list in Project Location Description)
Latitude:	38.6801461
Longitude:	-121.9701168
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	The estimated parcel locations are based on SEI's SAGBI and crop analysis that will be confirmed with farmer participation. For the 8-inch berm rainfall capture the potential parcels are 049-100-010, -011, -012, -024, -025, -030, -031, -033; 049-110-010, -027; 050-020-001, -004. For the 3-foot storm water detention basin the potential location would be half of APN 049-060-017.
County:	Yolo
City/Community:	Madison (rural County area)
Watershed:	Willow Slough into Madison Drain
Groundwater Basin:	Yolo Subbasin
Planning Area:	509. Central Basin West
Additional Comments:	
Project Status (Check only one)	<input checked="" type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	01/01/2020

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Plan Goals 2 (improve education & awareness), 3 (improve collective understanding of watershed characteristics & functions), 4 (improve the form & function of degraded channels), 7 (preserve, improve & manage water quality), 10 (provide reliable water supplies), 11 (reduce the risks of disruptive natural disturbances), 12 (support improved regional water management), 13 (support sustainable economic activities)
Objective(s) that the Project will help accomplish:	Education and Awareness Objective 2; Risk Management Focus Objective 14 and 15; Understand Watershed Function Focus Objective 17 and 18; Water Supply Focus Objective 24

<p>Explanation of Project linkage to goals and objectives</p>	<p>The farmer fields will capture rainfall to reduce the runoff contributed to Highway 16 and nearby County roads thereby improving the form and function of degraded channels. The storm water detention pond would improve the form and function of degraded channels by capturing rainfall and runoff and reducing the peak flows during storms. Both projects will reduce flooding in and around Madison and will augment groundwater supplies.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>The YCFCWCD will coordinate with Madison CSD to determine the extent of reduced flooding. Historical knowledge and pictures will be used to determine the reduction of flooding, along with visual observation by landowners during storm events. Road water levels will be compared to previous storm events.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance--- Delta	
Conveyance --- Regional / local	
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	Recharging groundwater by retaining water and allowing to percolate.
Desalination	
Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage----- CALFED	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	Reduces pollutants and contaminants in delayed retention period.
Salt and Salinity Management	
Urban Runoff Management	Reduces extraneous runoff to Madison.
Practice Resources Stewardship	
Agricultural Lands Stewardship	Improves watershed functions while continuing farming benefit.
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	Optimizes flow conveyance and capture.
Improve Flood Management	
Flood Risk Management	Reduces flooding to Madison.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)



Increase Water Supply		Groundwater recharge from stormwater capture and retention.	Depends on the water year, but farmer field conversions to berms allows 300 AF per storm event. With 27"/hour infiltration rate, would need at least 30 hours between storm events to dry out fields. For detention basin, 1,100 AF per storm with at least 5.5 days in between storms.
Improve Water Quality		Settling of pathogens, nutrients, and metals during delayed	
Groundwater Improvements		Increased groundwater supply from stormwater & retention.	Depends on the water year, but 300 AF per storm event for berms and 1,100 AF per storm event for detention basin.
Water Conservation and Reuse	✓		Capture of stormwater for groundwater recharge

Watershed Rehabilitation	<input checked="" type="checkbox"/>	Improved channel erosion in Madison Drain and roadside	Reduction in flows in ditches improves channel erosion -- not sure how to quantify the benefit.
Habitat Improvements			
Flood Management		Reduced peak discharge from storm events to Madison	Would benefit 10-year, 24-hour design storm event (5.65 in.) or event similar to January 2017 (1.72 in.)

Other Benefits:

Less flooding on County roads, improved traffic control and safety for locals.

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	N/A
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	The storm water capture and detention basin would reduce peak flows discharged through Madison Drain and roadside ditches thereby reducing the discharge & flooding through Madison. Parts of Madison are considered to be an SDAC

<p>d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.</p>	<p>N/A</p>
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<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>With increased intensity, duration, and frequency of storm events the project will assist the area in capturing additional flow to reduce flooding impacts to Madison, and to recharge the groundwater and increase groundwater supply.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>N/A</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs	\$100,000 - \$400,000	
1. Capital (2014 Dollars)		
2. Annual Operations and Maintenance (O&M)	\$0	
b. List secured source(s) of funding	Source(s)	Amount

<p>c. List proposed source(s) of funding and certainty of the sources.</p>	<p>Potentially YSGA could provide cost share or incentive groundwater credits to farmers.</p>
<p>d. For capital projects, explain how operation and maintenance costs will be financed.</p>	<p>N/A</p>
<p>e. Basis for project cost</p>	<p>\$100,000 estimate is for the 8-inch berms: \$5,000/farmer field (12 fields), plus Madison CSD/YCFCWCD staff time to initiate the program and execute it. \$400,000 is the estimated cost of the detention basin for leasing and modifying the property, and Madison CSD/YCFCWCD staff time</p>
<p>f. Can a detailed cost estimate be provided upon request?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
<p>a. Conceptual</p>	<p>Talking with farmers about conversion of their fields</p>	<p>November</p>	
<p>b. Planning</p>	<p>about conversion of fields. Notice of Intent from farmers for developing a proposal to the State</p>	<p>January 2019</p>	
<p>c. Environmental Documentation (CEQA/NEPA)</p>		<p>N/A</p>	
<p>d. Permitting</p>		<p>N/A</p>	
<p>e. Tribal Consultation</p>		<p>N/A</p>	
<p>f. Design</p>		<p>N/A</p>	
<p>g. Construction/Implementation</p>	<p>Modifying the property to capture precipitation</p>	<p>January 2020</p>	

IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>YCFCWCD storm water temporary permit process for recharging</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<p>YCFCWCD Conjunctive Use Policy and Program; and YCFCWCD storm water temporary permit with State Water Board</p>
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is “no”, do you intend to comply prior to receiving Project funding</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p>2. If not will a GWMP be completed within 1 year of the grant submittal date?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>

Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:

<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

Madison CSD Farmer Field Storm Water Capture and Groundwater Recharge

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A

c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Modification of approximately 1,200 acres of farmer fields to capture precipitation around Madison will reduce flood waters to the Madison Drain and roadside ditches and provide an immediate storm water benefit to Madison. Maximum capacity of 800 acre-feet for the 8-" berm fields. Modification of farmer field near Cache Creek (maybe half of APN 049-060-017) to allow for a 3-' storm water detention basin to capture precipitation and channel storm flows for capture, with maximum capacity of 1,100 acre-feet.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Increased filtration and/or treatment of runoff	X	Settling of pathogens, nutrients, and metals during delayed detention period.	Likely minimal benefit
Water Supply – Water supply reliability	X	Groundwater recharge from stormwater detention	300 AF - 1,100 AF per storm event (farmer fields - detention basin)
Water Supply – Conjunctive use	X	Groundwater recharge from stormwater detention	300 AF - 1,100 AF per storm event (farmer fields - detention basin)
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	X	Decreased flood risk by reducing runoff	300 AF - 1,100 AF per storm event (farmer fields - detention basin)
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education	X	Great pilot project opportunity to test farmers willingness to participate and the crop durability to excessive flooding	Likely will report on the outcome

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment	X	Slowing of flows will result in reestablished natural water drainage and settling of solids in a detention pond	Likely minimal
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement			
Community – Enhance and/or create recreational and public use areas			



Project Information Form

The Westside Region is accepting suggestions for projects for inclusion in the Westside Integrated Regional Water Management (IRWM) Plan. Projects submitted for consideration should contribute to the attainment of the IRWM Plan Goals and Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form to info@westsideirwm.com.

Please provide information in the tables below:

I. Project Proponent Information

Lead Agency/ Organization	Madison Community Services District
Name of Primary Contact	Leo Refsland
Mailing Address	PO Box 40 Madison, CA 95653
E---mail	lrefmcsdist@yahoo.com
Phone (###)###-####	
Other Cooperating Agencies/Organizations	Yolo County Flood Control and Water Conservation District, The Stockholm Environment Institute
Is your agency committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Western Yolo Sloughs Citizen Science Program
Project Description (Briefly describe the project, in 300 words or less,)	Sloughs surrounding the Madison area are known to cause regular flooding in Madison and beyond. Namely, Cottonwood Slough, Lamb Valley Slough, the South Fork Willow Slough and the Madison Drain have been identified as sources of flooding in Madison in various studies and reports. It seems likely that mitigation upstream in these sloughs to remove water before the sloughs reach Madison and Esparto, and management of the sloughs to keep them free of debris could help in alleviating flooding in the area. However, none of these channels are monitored, therefore, it is unknown what capacity these sloughs have, when that capacity is reached (during or after a storm), or what type of mitigation would be most fitting for each slough. Additionally, it is not known if the Winters Canal is also full when sloughs are full, or if it may have capacity that could be used to alleviate the sloughs when they are overflowing. The Madison CSD with its partners will develop a citizen science program where Madison residents and residents from the nearby areas will visit sloughs and canals that carry water in and around Madison following rain events. The program members will record whether they see water flowing in the sloughs and canals at previously determined locations, and record observations such as whether the channels are successfully carrying the flows, appear to be obstructed, or are overflowing. The information will be compiled in an easy to use format so that members can easily share the information with Madison CSD and others. The information will initially be used until a flow monitoring network can be developed in the sloughs, and potentially beyond. The goal is to gain a better understanding of the slough flow patterns and information that can be used to plan for flood mitigation in Madison, while also engaging and educating the community.

Project Location:	Northwestern region of Yolo County, west of Hwy 505 and south of Cache Creek
Latitude:	N/A
Longitude:	N/A
Can you provide a map of the project location including boundaries upon request?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No
Project Location Description:	Sites to be visited regularly by program members include various points on the Cottonwood Slough, Lamb Valley Slough, the South Fork Willow Slough and the Madison Drain and winters Canal in and around Madison, CA.
County:	various points on the Cottonwood Slough, Lamb Valley
City/Community:	
Watershed:	Willow Slough
Groundwater Basin:	Yolo Subbasin
Planning Area:	509. Central Basin West
Additional Comments:	
Project Status (Check only one)	<input type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Planning <input type="checkbox"/> CEQA/NEPA <input type="checkbox"/> Permitting <input type="checkbox"/> Design <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Study/Other <input type="checkbox"/> Maintenance/Monitoring
Earliest expected start date (mm/dd/yr)	10/01/2018

III. Plan Goals/Objectives Addressed

For each of the goals/objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective. Information related to the proposed goals and objectives can be found at www.westsideirw.com/irwmplan. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the region.

Goal(s) that the Project will contribute to:	Plan Goals 2 (improve education & awareness), 3 (improve collective understanding of watershed characteristics & functions), 4 (improve the form & function of degraded channels), 7 (preserve, improve & manage water quality), 10 (provide reliable water supplies), 11 (reduce the risks of disruptive natural disturbances), 12 (support improved regional water management)
Objective(s) that the Project will help accomplish:	Education and Awareness Objective 2; Risk Management Focus Objective 14 and 15; Understand Watershed Function Focus Objective 17 and 18; Water Supply Focus Objective 24

<p>Explanation of Project linkage to goals and objectives</p>	<p>Including the community in data collection can lead to an increased understanding of the watershed where they live, the issues and opportunities that their community is faced with, and to more collaborative solutions to problems. The data collected by the program members will help water managers and decisions makers understand the flooding issues that Madison is faced with, specifically from slough over-topping, and therefore to better design solutions and actively manage the issue.</p>
<p>How will the project be measured to ensure the goals and objectives are being fulfilled?</p>	<p>The success of the project will be measured in number of program members, and number of observations recorded.</p>

IV. Resource Management Strategies

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here: <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Reduce Water Demand	
Agricultural Water Use Efficiency	
Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	
Conveyance--- Delta	
Conveyance --- Regional / local	Improve understanding of the storm conveyance system in place around Madison, so that it can be better managed and modified to alleviate flooding.
System Reoperation	
Water Transfers	
Increase Water Supply	
Conjunctive Management & Groundwater	A better understanding of where and when too much water is available, can give water managers the information they need to design solutions to use that water as a resource for groundwater recharge
Desalination	

Precipitation Enhancement	
Recycled Municipal Water	
Surface Storage ----- CALFED	
Surface Storage ----- Regional / Local	

Improve Water Quality	
Drinking Water Treatment and Distribution	
Groundwater and Aquifer Remediation	
Matching Water Quality to Use	
Pollution Prevention	
Salt and Salinity Management	
Urban Runoff Management	
Practice Resources Stewardship	
Agricultural Lands Stewardship	
Economic Incentives (Loans, Grants, and Water Pricing)	
Ecosystem Restoration	
Forest Management	
Land Use Planning and Management	This will ultimately improve land use planning and management by improving knowledge of slough conditions and storm water flows.
Recharge Areas Protection	
Water---dependent Recreation	
Watershed Management	Bolstering information management in the area will improve watershed management and result in management actions for improved storm water management
Improve Flood Management	
Flood Risk Management	Ultimately, flood risk management will improve because of the increase in local knowledge of the behaviors of sloughs and storm flows that will result in better management and reduced flooding.

V. Project Impacts and Benefits

Please select all the project benefit categories that apply and provide a brief explanation. If the project benefits do not fit any of the listed categories, please explain in the box below. Suggested benefit descriptions are included in the Project Information Form instructions sheet.

Benefit Categories:		Brief Explanation of Selected Benefits	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Increase Water Supply			
Improve Water Quality			
Groundwater Improvements			
Water Conservation and Reuse			



Watershed Rehabilitation	<input type="checkbox"/>		
Habitat Improvements	<input type="checkbox"/>		
Flood Management	<input type="checkbox"/>	Increased knowledge of existing flooding issues can help water managers and	Conceptual project, but will result in action that can reduce localized flooding

Other Benefits:

Please provide a summary of the expected project benefits and impacts in the table below.

a. Describe any expected impacts of the project	Use of community members' time
b. If applicable, describe benefits or impacts of the project with respect to Native American Tribal Community considerations.	Highway 16 at Madison is often flooded, and this is the highway giving access to the Cache Creek Casino, owned and operated by the Yocha Dehe Wintun Nation. When the highway is closed due to flooding, the casino and the Yocha Dehe Wintun Nation's land in the Capay Valley is inaccessible from the rest of Yolo County.
c. If applicable, describe benefits or impacts of the project with respect to Disadvantaged Communities*.	Madison is a Disadvantaged Community and the project aims to gain information that will eventually lead to alleviating flooding in Madison.
d. If applicable, describe benefits or impacts of the project with respect to Environmental Justice ** considerations.	Madison already experiences inequitable effects of California's weather patterns with the evident regular flooding, as compared to the larger, wealthier cities in Yolo County such as Davis and Woodland which do not experience flooding to the same extent or frequency.

<p>e. If applicable, describe how the project assists the region in adapting to effects of climate change.</p>	<p>As climate change further exacerbates floods and droughts in California, Madison, a small Disadvantaged Community will continue to feel these effects though means of worse and more frequent flooding. Additional information to allow water managers to plan for and mitigate this flooding will make Madison more resilient in the face of climate change.</p>
<p>f. If applicable, describe the generation or reduction of greenhouse gas emissions associated with the project.</p>	<p>N/A</p>

*A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map identifying DACs in the Westside Region is available at www.westsideirwm.com.

** Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies.

VI. Statewide Program Preferences and Priorities

Please select the Program Preferences and Statewide Priorities that apply to the proposed project (choose all that apply).

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub---region specifically identified by DWR
- Effectively resolve significant water---related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay---Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies Achieve
- long term reduction of water use
- Efficient groundwater basin management
- System inerties

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling
- Capture, store, treat, and use urban stormwater runoff (such as percolation to usable aquifers, underground storage beneath parks, small surface basins, domestic stormwater capture systems, or the creation of catch basins or sumps downhill of development)
- Incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff

Climate Change Response Actions

- Adaptation to Climate Change: Advance and expand conjunctive management of multiple water supply sources
- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
 - Adaptation to Climate Change: Establish migration corridors, re---establish river---floodplain hydrologic continuity, re---introduce anadromous fish populations to upper watersheds, enhance and protect upper watershed forests and meadow systems
- Reduction of Greenhouse Gas (GHG) Emissions: Reduce energy consumption of water systems and uses
- Reduction of Greenhouse Gas (GHG) Emissions: Use cleaner energy sources to move and treat water
- Reduce Energy Consumption: Water use efficiency
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Expand Environmental Stewardship

- Expand Environmental Stewardship to protect and enhance the environment by improving watershed, floodplain, and instream functions and to sustain water and flood management

ecosystems.

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems
- Enhanced floodplain ecosystems
- LID techniques that store and infiltrate runoff while protecting groundwater

Protect Surface Water and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses
- Salt/nutrient management planning as a components of an IRWM Plan

Improve Tribal Water and Natural Resources

- Improve Tribal Water and Natural Resources and include the development of Tribal consultation, collaboration, and access to funding for water programs.

Ensure Equitable Distribution of Benefits

- Increase the participation of small and disadvantaged communities in the IRWM process.
- Develop multi---benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
- Contain projects that address safe drinking water and wastewater treatment needs of DACs.
- Address critical water supply or water quality needs of California Native American Tribes within the region.

VII. Project Cost and Financing

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs as well as the source of the project cost in the table below.

a. Project Costs		
1. Capital (2014 Dollars)		
2. Annual Operations and Maintenance (O&M)		
b. List secured source(s) of funding	Source(s)	Amount

c. List proposed source(s) of funding and certainty of the sources.		
d. For capital projects, explain how operation and maintenance costs will be financed.		
e. Basis for project cost		
f. Can a detailed cost estimate be provided upon request?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

VIII. Project Status and Schedule

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
a. Conceptual	Develop how the Citizen Science program will operate, who will do what, which sites will be visited and how data will be collected	3/8/18	10/1/18
b. Planning	Identify individuals to participate in the program and train them on data collection	3/8/18	10/1/18
c. Environmental Documentation (CEQA/NEPA)			
d. Permitting			
e. Tribal Consultation			
f. Design			

g. Construction/Implementation	Begin collecting information	10/1/18	10/1/18
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IX. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p>a. List water planning documents that specifically identify this project.</p>	<p>Conceptual project to assist Madison's localized flooding issues by improving information management and local knowledge and observations.</p>
<p>b. List the adopted planning documents the proposed project is consistent with (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>d. If you are an Urban Water Supplier:</p>	
<p>1. Have you completed an Urban Water Management Plan and submitted to DWR?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. Are you in compliance with AB1420?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>3. Do you comply with the water meter requirements (CWC §525)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>4. If the answer to any of the questions above is "no", do you intend to comply prior to receiving Project funding</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p>
<p>e. If you are an Agricultural Water Supplier:</p>	
<p>1. Have you completed and submitted an AWMP (due 12/31/12)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>
<p>2. If not, will you complete and submit an AWMP prior to receiving project funding?</p>	<p>Yes No <input checked="" type="checkbox"/> N/A</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>f. If the project is related to groundwater:</p>	
<p>1. Has a GWMP been completed and submitted for the subject basin?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p>

2. If not will a GWMP be completed within 1 year of the grant submittal date?	Yes	No	<input checked="" type="checkbox"/> N/A
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Project Information Form SWRP Projects Addendum

The Yolo WRA is accepting suggestions for projects for inclusion in the Yolo Storm Water Resource Plan (SWRP). Projects submitted for consideration should contribute to the attainment of the IRWM Plan and SWRP Objectives. To have your project considered for inclusion, please complete this project information form in its entirety and submit the completed form by **July 28, 2017** to **Kristin Sicke (ksicke@ycfcwcd.org)**.

Please provide information below:

I. Has this project been submitted to the Westside IRWMP previously?

- Yes Please provide the Project Name as submitted on the Westside Sac IRWMP Project Information Form:

Western Yolo Sloughs Citizen Science Program

- No If you answered no, the Westside Sac IRWMP Project Information Form must be completed and submitted with this form. The form can be downloaded at:
<http://www.westsideirwm.com/Westside%20IRWMP%20Web%20Page/documents/Project%20Update%20Form-09-01-14.pdf>

If you answered yes to the above question, please provide any additional project description/details not provided in the original Westside IRWMP Project Form related to storm water:

II. Land Availability

- a. Is the project located on lands with Public ownership? Yes No N/A
- b. Have easements and/or all required land use agreements been obtained or are pending? Yes No N/A
- c. Describe how this project will result in immediate or downstream storm water benefit to Yolo County:

Information from this program will fill some existing gaps in knowledge for water managers to be able to design and implement future projects and management actions to reduce flooding result from sloughs in and around Madison.

III. SWRP Objectives – In addition to IRWMP Objectives

Please mark (x) the SWRP Objectives that apply to the proposed project (choose all that apply).

- Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects.
- Optimize the rural storm water conveyance system to drain and retain storm water flows as necessary. Provide proper rural drainage and keep conveyance systems clear of debris to minimize county road flooding during storm events.
- Enable proper rural retention and modify rural landscape to maximize groundwater recharge of excess storm water.

IV. SWRP Guideline Benefit Categories

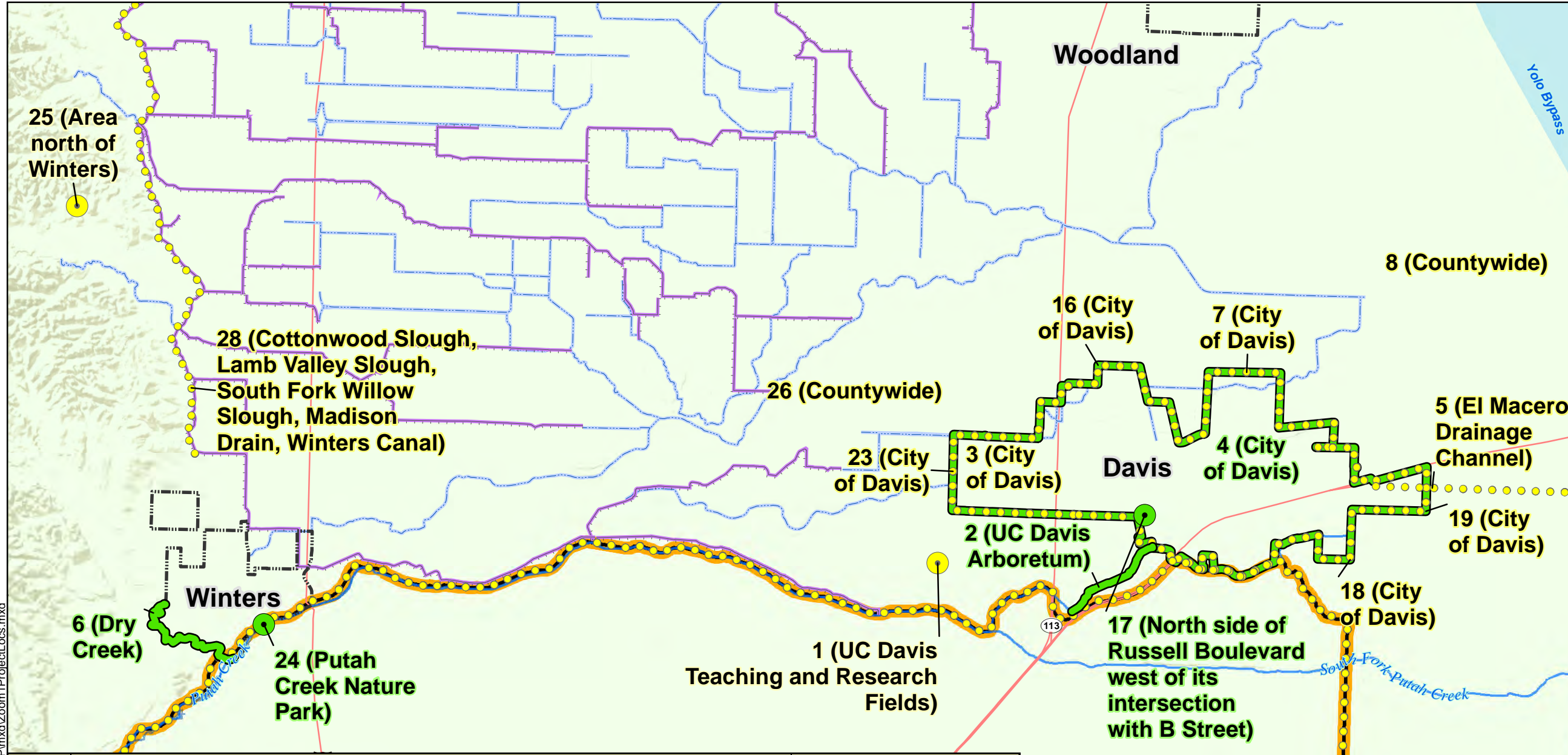
Please mark (x) all the project benefit categories that apply and provide a brief explanation. Suggested benefit descriptions are included in the SWRP Guidelines Tables 3 and 4.

MAIN BENEFIT(S)


	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied,
Water Quality – Increased filtration and/or treatment of runoff			
Water Supply – Water supply reliability			
Water Supply – Conjunctive use			
Flood Management – Decreased flood risk by reducing runoff rate and/or volume	x	Information from this program will fill some existing gaps in knowledge for water managers to be able to design and implement future projects and management actions to reduce flooding result from sloughs in and around Madison.	N/A
Environmental – Environmental and habitat protection and improvement			
Environmental – Increased urban green space			
Community – Employment opportunities provided			
Community – Public education	x	Involving the community in data collection can improve individuals understanding of their watershed and stormwater system.	N/A

SECONDARY BENEFIT(S)

	x	Brief Explanation of Benefit	Quantification (e.g. acre---feet of water supplied, acres of habitat restored)
Water Quality – Nonpoint source pollutant control			
Water Quality – Reestablished natural water drainage and treatment			
Water Supply – Water conservation			
Flood Management – Reduced sanitary sewer overflows			
Environmental – Reduced energy use, greenhouse gas emissions, or provides			
Environmental – Reestablishment of the natural hydrograph			
Environmental – Water temperature improvements			
Community – Community involvement	x	Involving the community in data collection can lead to more collaborative solutions that benefit all members of the community.	N/A
Community – Enhance and/or create recreational and public use areas			





Project No.	Project Name	Lead Agency Organization
1	Agricultural Stormwater Improvements	University of California, Davis
2	Arboretum Waterway Wetland Restoration and Enhancement	University of California, Davis
3	Bike Tunnel Landscaping Redesign for Stormwater Quality Improvement	City of Davis
4	Davis Greenbelts Landscape Conversions (Davis Greenbelts Stormwater Improvements)	City of Davis
5	Drainage Channel Feasibility Study	City of Davis
6	Dry Creek Bank Stabilization and Wastewater Re-use	Solano County Water Agency
7	Feasibility Study for Stormwater Trash Control Measures	City of Davis
8	Flood Monitoring Network Project	YFCWCWCD
17	Russel Boulevard Demonstration LID Project (Russel Boulevard Stormwater Treatment Project)	City of Davis
18	Site Survey for Converting Rocky Swales to Bioswales	City of Davis
19	Site Survey for Hardscape Conversion to Pervious Pavement	City of Davis
23	West Area Pond Redesign (West Area Pond Runoff Redesign)	City of Davis
24	Winters Bioswales Project and Habitat Enhancement	Solano County Water Agency
25	Winters North Area Stormwater Pond	YFCWCWCD
26	Yolo County Drains and Sloughs -- Governance and Maintenance Study	YFCWCWCD
28	Western Sloughs Citizen Science Program	Madison CSD




— Sloughs w/in YFCFC&WCD Boundary


— Canals w/in YFCFC&WCD Boundary


 Yolo SWRP Boundary


 Westside Region

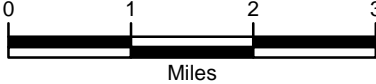
Projects

 Conceptual/Planning

 Implementation

 Implementation

 Conceptual/Planning



Miles

Kennedy/Jenks Consultants

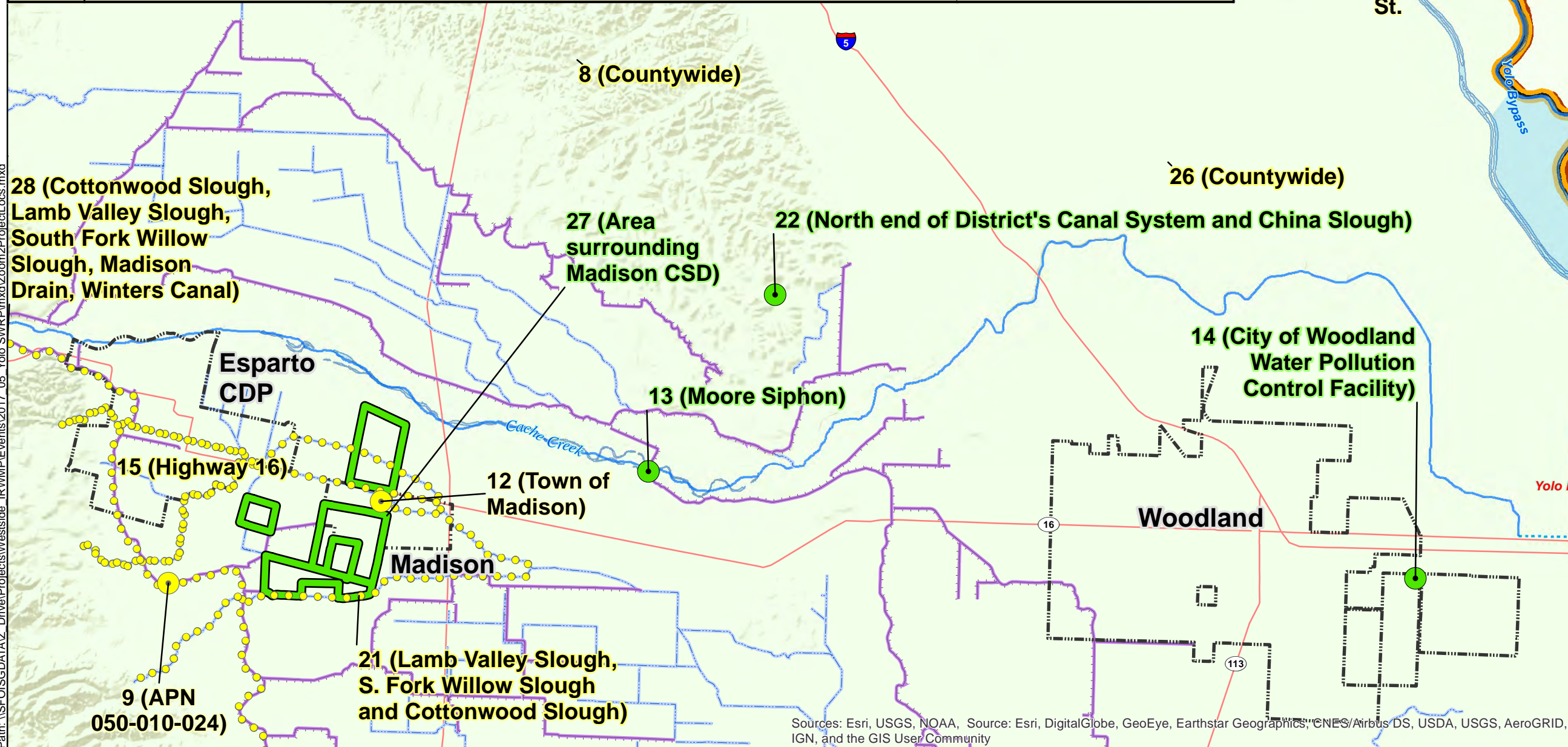
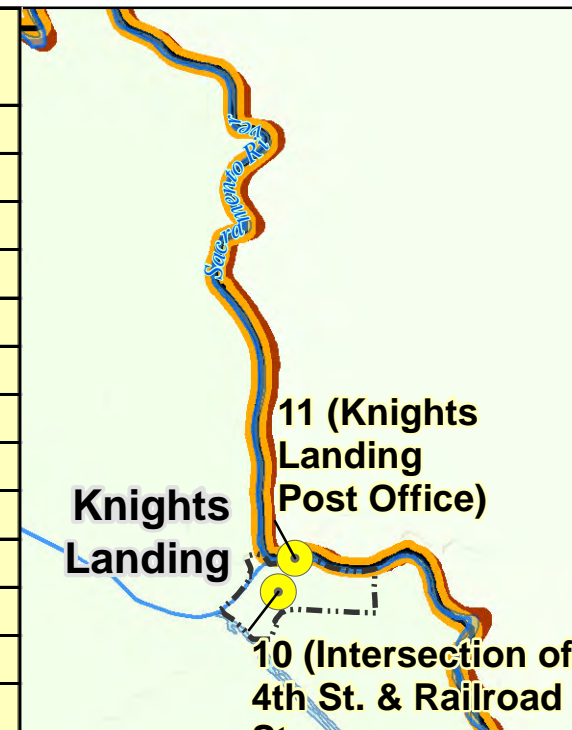
**Storm Water Resource Plan
For Yolo County**

Project Locations (Zoom in - South)

K/J 1770002.00
May 2018

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Project No.	Project Name	Lead Agency Organization
8	Flood Monitoring Network Project	YCFCWCD
9	Forbes Ranch Regulating Pond	YCFCWCD
10	Knights Landing Storm Drain Project	Yolo County
11	Knights Landing Underground Drainage Study	Yolo County
12	Madison Drainage Study	Yolo County
13	Moore Siphon Reliability/Restoration Project (Moore Siphon Stormwater Improvements)	YCFCWCD
14	North Regional Pond and Pump Station	City of Woodland
15	Raise Highway 16 Out of Flood plain	YCFCWCD/Yolo County
21	Upstream Flow Management to Prevent Madison Flooding and to Facilitate GW Recharge	YCFCWCD/Madison CSD
22	West Adams Canal Renovation and China Slough Rehabilitation Project	YCFCWCD
26	Yolo County Drains and Sloughs -- Governance and Maintenance Study	YCFCWCD
27	Madison Farmer Field Stormwater Capture and Groundwater Recharge	Madison CSD
28	Western Sloughs Citizen Science Program	Madison CSD



- Sloughs w/in YCFC&WCD Boundary
- Canals w/in YCFC&WCD Boundary
- Yolo SWRP Boundary
- Westside Region

Projects

- Conceptual/Planning
- Implementation
- Implementation
- Conceptual/Planning

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Kennedy/Jenks Consultants

Storm Water Resource Plan

For Yolo County

Project Locations (Zoom in - North)

K/J 1770002.00
May 2018

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Sources: Esri, USGS, NOAA, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community