

## Meeting Agenda

**Yolo Storm Water Resources Plan****Working Group Meeting 2**

Handouts and Meeting Materials Available on Yolo WRA Website:  
[http://www.yolowra.org/meeting\\_irwmp.html](http://www.yolowra.org/meeting_irwmp.html)

Location: Yolo County Flood Control and Water Conservation District Boardroom,  
 34274 State Highway 16, Woodland 95695  
 Call-In Number: (855) 813-2486; Access Code: 2714#  
 Date/Time: 06 April 2017, 10:30 AM

1	Review Agenda and Safety Moment	5 minutes
2	Summary of Last Meeting (March 9, 2017)	5 minutes
2	Storm Water Resources Plan (SWRP) Outline <ul style="list-style-type: none"> <li>• Outline (Handout #1)</li> <li>• Data Gaps (GIS, Other)           <ul style="list-style-type: none"> <li>○ Community zoning?</li> </ul> </li> </ul>	10 minutes
3	SWRP Objectives <ul style="list-style-type: none"> <li>• SWRP Objectives           <ol style="list-style-type: none"> <li>1. Westside IRWM Plan Objectives</li> <li>2. SWRP Guidelines Multi-Benefit Objectives (Guidelines Page 9, Table 3 and Table 4) (Handouts #2 and #3)</li> </ol> </li> <li>• IRWM Plan and SWRP Guidelines Objectives Comparison (Handout #4)           <ul style="list-style-type: none"> <li>○ Proposed Objectives</li> </ul> </li> </ul>	20 minutes
4	Project Brainstorming and Discussion <ul style="list-style-type: none"> <li>• Current Projects (Handout #5)</li> <li>• Potential Projects Survey (Google Docs) (Handout #6)</li> <li>• Draft Call for Projects</li> </ul>	20 minutes
5	Other Discussion	10 minutes
6	Next Meeting – May 4, 2017, 10:30 am, Yolo County Flood Control and Water Conservation District Boardroom, 34274 State Highway 16, Woodland 95695 Topics: <ul style="list-style-type: none"> <li>- Call for Projects Preparation</li> <li>- Introduction to Quantitative Methods (GIS analysis, WEAP, Simple Method)</li> <li>- Identification of EDAs/DACs</li> <li>- Draft Section 1: Introduction and SWRP Objectives</li> </ul>	5 minutes

**Yolo Storm Water Resources Plan  
Working Group Meeting 2**  
06 April 2017

7	<p>Handouts – Available on Yolo WRA IRWMP website: <a href="http://www.yolowra.org/meeting_irwmp.html">http://www.yolowra.org/meeting_irwmp.html</a></p> <ol style="list-style-type: none"><li>1. Outline</li><li>2. Guidelines Table 3. Benefit Metrics</li><li>3. Guidelines Table 4. Storm Water Management Benefits</li><li>4. IRWM Plan and Guidelines Objectives Comparison</li><li>5. Current Projects</li><li>6. Potential Projects Survey (Google Docs)</li></ol>	
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TABLE 3. BENEFIT METRICS		
Benefit	Example	Metric Unit(s)
<b>Water Quality</b> <i>while contributing to compliance with applicable permit and/or TMDL requirements</i>	Increased filtration and/or treatment of runoff	<b>Pollutant Load Reduction</b> 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	<b>Volume Treated</b> million gallons per day (mgd) acre-feet per year (afy)
<b>Water Supply</b> <i>through groundwater management and/or runoff capture and use<sup>11</sup></i>	Water supply reliability	<b>Volume Captured</b> <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	<b>Cost</b> dollars per volume per year (of augmented water supply)
<b>Flood Management</b>	Decreased flood risk by reducing runoff rate and/or volume	<b>Rate, Volume, and/or Size</b> cubic feet per second (cfs) acre-feet (af) cubic feet (cf) acres or linear feet
	Reduced sanitary sewer overflows	
<b>Environmental</b>	Environmental and habitat protection and improvement, including:	<b>Size and/or Rate</b> acres cubic feet per second (cfs) carbon sequestration (megagrams of carbon per area)
	- wetland enhancement/creation; - riparian enhancement; and/or - instream flow improvement	

<sup>11</sup> 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)
<b>Environmental</b> <i>(continued)</i>	Increased urban green space	<b>Other</b> <sup>12</sup> area units of landscape and buffer measure of improved hydrology number of biotic structure number of physical structures  reduced temperature (degrees)
	Reduced energy use, greenhouse gas emissions, or provides a carbon sink	
	Reestablishment of the natural hydrograph	
	Water temperature improvements	
<b>Community</b>	Enhanced and/or created recreational and public use areas	<b>Size</b> 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:

<sup>12</sup> 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 interspersion, 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
<b>Water Quality</b> <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
<b>Water Supply</b> <i>through groundwater management and/or runoff capture and use</i>	Water supply reliability	Water conservation
	Conjunctive use	
<b>Flood Management</b>	Decreased flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows
<b>Environmental</b>	Environmental and habitat protection and improvement, including; <ul style="list-style-type: none"> <li>- wetland enhancement/creation;</li> <li>- riparian enhancement; and/or</li> <li>- instream flow improvement</li> </ul>	Reduced energy use, greenhouse gas emissions, or provides a carbon sink
	Increased urban green space	Reestablishment of the natural hydrograph
<b>Community</b>	Employment opportunities provided	Water temperature improvements
	Public education	Community involvement
		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.

Westside Sacramento IRWM Plan Objectives vs SWRP Guideline Objectives	SWRP Guideline Objectives													
	1. Creates and restores wetlands (Wat. Code, § 10561(g))	2. Riverside [riparian] habitats (Wat. Code, § 10561(g))	3. Instream flows (Wat. Code, § 10561(g))	4. Increase in park and recreation lands (Wat. Code, § 10561(g))	5. Urban green space (Wat. Code, § 10561(g))	6. Augments recreation opportunities for communities (Wat. Code, § 10561(h))	7. Increases tree canopy (Wat. Code, § 10561(h))	8. Reduces heat island effect (Wat. Code, § 10561(h))	9. Improves air quality (Wat. Code, § 10561(h))	10. Maximizes water quality (Wat. Code, § 10562(b)(2))	11. Maximizes water supply (Wat. Code, § 10562(b)(2))	12. Maximizes flood management (Wat. Code, § 10562(b)(2))	13. Maximizes environmental benefits (Wat. Code, § 10562(b)(2))	14. Maximizes other community benefits (Wat. Code, § 10562(b)(2))
<p><a href="#">Westside Sacramento IRWM Plan, June 2013.</a> Section 6: Goals and Objectives, 6.4 Plan Objectives</p> <p><a href="#">Storm Water Resources Plan Guidelines, December 2015</a> Multi-Benefit / Multiple Benefit Projects, Page 9</p> <p>Storm water and dry weather runoff capture projects that provide more than one benefit or meets more than one objective.</p>														
<b>Westside Sacramento IRWM Plan Objectives</b>														
<b>Education and Awareness Focus</b>														
1. Provide and promote use of educational curricula for K-12 students														x
2. Provide educational information to encourage stewardship by public														x
<b>Habitat Focus</b>														
3. Restore native vegetation/form/function along riparian/aquatic corridors	x	x												
4. Quantify the extent of suitable life-cycle habitat for Threatened/Endangered/Imperiled native fish			x										x	
5. Prioritize/plan/schedule improvements to suitable life-cycle habitat for T/E/I native fish			x										x	
6. Increase availability of suitable life-cycle habitat for Threatened/Endangered/Imperiled native fish identified.			x										x	
<b>Invasive Species Focus</b>														
7. Prevent colonization by quagga mussels/zebra mussels and eliminate/prevent spread of New Zealand mud snails		x											x	
8. Establish invasive plant management plan		x											x	
9. Implement invasive plant management plan		x											x	
<b>Infrastructure Focus</b>														
10. Create asset management plan for key water management infrastructure										x	x	x		
<b>Reasonable Use Focus</b>														
11. Meet 20% by 2020 conservation targets			x								x			
12. Increase adoption of agricultural Best Management Practices		x	x							x	x			
<b>Recreation Focus</b>														
13. Maintain and increase water-related recreational opportunities				x	x	x								
<b>Risk Management Focus</b>														
14. Provide adequate flood protection												x		
15. Manage watershed activities to reduce large erosion events	x	x							x	x	x	x		
<b>Understand Watershed Function Focus</b>														
16. Monitor state/federal Delta programs														
17. Monitor conditions/improve understanding to support sustainable groundwater basins											x			
18. Maintain/enhance watershed and natural resource monitoring network and information sharing										x				
<b>Water Quality Focus</b>														
19. Address pollutant sources to meet runoff standards and Total Maximum Daily Load (TMDL) targets										x				
20. Minimize accidental wastewater spillage/discharges										x		x		x
21. Reduce public health risks by reducing contaminants in drinking water sources										x	x			x
22. Meet all drinking water and wastewater discharge standards											x			x
<b>Water Supply Focus</b>														
23. Provide 100% reliability of municipal and industrial water supplies										x	x			
24. Provide agricultural water supplies to support a robust agricultural industry										x	x			
<b>Proposed Objective</b>														
25. Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects							x	x						
<b>Benefit Totals</b>	2	6	5	1	1	1	1	1	1	9	8	4	7	5



Westside Sacramento IRWM Plan Objectives vs SWRP Benefit Categories	SWRP Guideline Benefit Categories																		
	Water Quality			Water Supply			Flood Management		Environmental								Community		
	Increase filtration and/or treatment of runoff	Nonpoint source pollution control	Reestablished natural water drainage and treatment	Water supply reliability	Water conservation	Conjunctive use	Decreased flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows	Environmental and habitat protection and improvement	Wetland enhancement/creation	Riparian enhancement	Instream flow improvement	Increased urban green space	Reduced energy use, greenhouse gas emissions, or provides a carbon sink	Reestablishment of the natural hydrograph	Water temperature improvements	Enhanced and/or created recreational and public use areas	Community involvement	Employment opportunities provided
<p><a href="#">Westside Sacramento IRWM Plan, June 2013.</a> Section 6: Goals and Objectives, 6.4 Plan Objectives</p> <p><a href="#">Storm Water Resources Plan Guidelines, December 2015</a> Multi-Benefit / Multiple Benefit Projects, Page 9</p> <p>Storm water and dry weather runoff capture projects that provide more than one benefit or meets more than one objective.</p>																			
<b>Westside Sacramento IRWM Plan Objectives</b>																			
<b>Education and Awareness Focus</b>																			
1. Provide and promote use of educational curricula for K-12 students																		x	
2. Provide educational information to encourage stewardship by public																		x	
<b>Habitat Focus</b>																			
3. Restore native vegetation/form/function along riparian/aquatic corridors			x					x	x	x	x				x				
4. Quantify the extent of suitable life-cycle habitat for Threatened/Endangered/Imperiled native fish								x	x	x	x				x				
5. Prioritize/plan/schedule improvements to suitable life-cycle habitat for T/E/I native fish								x	x	x	x				x				
6. Increase availability of suitable life-cycle habitat for Threatened/Endangered/Imperiled native fish identified by Objective 5.								x	x	x	x				x				
<b>Invasive Species Focus</b>																			
7. Prevent colonization by quagga mussels/zebra mussels and eliminate/prevent spread of New Zealand mud snails								x		x									
8. Establish invasive plant management plan								x		x									
9. Implement invasive plant management plan								x		x									
<b>Infrastructure Focus</b>																			
10. Create asset management plan for key water management infrastructure				x															
<b>Reasonable Use Focus</b>																			
11. Meet 20% by 2020 conservation targets				x	x														
12. Increase adoption of agricultural Best Management Practices		x		x	x	x													
<b>Recreation Focus</b>																			
13. Maintain and increase water-related recreational opportunities																x	x		
<b>Risk Management Focus</b>																			
14. Provide adequate flood protection							x	x											
15. Manage watershed activities to reduce large erosion events			x				x								x				
<b>Understand Watershed Function Focus</b>																			
16. Monitor state/federal Delta programs			x												x			x	
17. Monitor conditions/improve understanding to support sustainable groundwater basins	x			x		x												x	
18. Maintain/enhance watershed and natural resource monitoring network and information sharing	x			x		x			x	x	x	x			x			x	
<b>Water Quality Focus</b>																			
19. Address pollutant sources to meet runoff standards and Total Maximum Daily Load (TMDL) targets	x	x	x																
20. Minimize accidental wastewater spillage/discharges							x	x											
21. Reduce public health risks by reducing contaminants in drinking water sources	x	x	x	x			x	x											
22. Meet all drinking water and wastewater discharge standards	x	x	x	x			x	x											
<b>Water Supply Focus</b>																			
23. Provide 100% reliability of municipal and industrial water supplies				x															
24. Provide agricultural water supplies to support a robust agricultural industry				x															
<b>Proposed Objective</b>																			
25. Convert paved and/or impervious areas and increase tree canopy and vegetation, reducing urban heat island effects												x	x			x			
<b>Benefit Totals</b>	5	4	6	9	2	3	5	4	8	5	8	5	1	1	3	4	2	6	0

## Westside SAC IRWM Projects for Yolo SWRP Consideration

HANDOUT #5

Project No.	Lead Agency Organization	Project Title	Project Description Briefly describe the project in 300 words or less
1	West Sacramento Area Flood Control	Bees Lakes Preserve	Conserve and develop limited, low-impact pedestrian-only recreational access to a 23-acre open space area containing sensitive aquatic, riparian, emergent and upland habitats which are associated with the Sacramento River.
2	Lower Putah Creek Coord. Committee	505-East Channel Restoration	Restore 10 acres of riparian forest, 3/4 mile of river channel, remove 22 occurrences (2 net acres) of 6 primary invasive weeds: arundo, eucalyptus, Himalayan blackberry, tree of heaven, fig and tamarisk; reconfigure one thousand feet of river channel, restore 100 feet of eroding streambank, create 3/4 mile of south bank bench trail connecting Yolo Housing to the City of Winters at low flows.
3	Lower Putah Creek Coord. Committee	Apricot Draw Bank Stabilization	Restores 3,000 feet of Apricot Draw, stabilizing eroding banks, removing invasive weeds and planting native vegetation.
4	Lower Putah Creek Coord. Committee	Dry Creek Wildlife Migration Corridor Feasibility Study	Feasibility study to restore 2 miles of wildlife corridor from the confluence of Putah Creek along Dry Creek on the western boundary of Winters
5	Lower Putah Creek Coord. Committee	Duncan-Giovannoni Channel Restoration Feasibility Study	Determine feasibility to restore 80 acres of riparian forest, reconfigure one mile of river channel, remove 96 occurrences (7 net acres) of 5 primary invasive weeds: arundo, Himalayan blackberry, tree of heaven, fig and tree tobacco. Convert five acres of excess open water (gravel pit captured by the channel) to floodplain, restore natural meander form, pool-riffle sequence, functional floodplain elevations, salmon spawning habitat and native vegetation.
6	Lower Putah Creek Coord. Committee	Glide Ranch Channel Restoration Feasibility Study	Feasibility study to restore 160 acres of riparian forest, reconfigure 11,250 feet of river channel, remove 128 occurrences (8 net acres) of 8 primary invasive weeds: arundo, black locust, eucalyptus, fig, Himalayan blackberry, pepperweed, tamarisk and tree of heaven. Grade floodplain to functional elevation, convert 15 acres of excess open water to floodplain, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
7	Lower Putah Creek Coord. Committee	Putah Creek Interdam Reach Invasive Weed Control	Remove 127 occurrences (8.6 net acres) of 11 primary invasive weeds: arundo, black locust, eucalyptus, fennel, fig, Himalayan blackberry, pampas grass, pepperweed, tree of heaven, tree tobacco and yellow star thistle from 6.5 river miles (400 acres) of riparian corridor between Monticello Dam and Putah Diversion Dam and install native vegetation where weeds are removed.
8	Lower Putah Creek Coord. Committee	Lower McNamara Pool Channel Reconfiguration Feasibility Study	Determine feasibility to: restore 25 acres of riparian forest, reconfigure 3,150 feet of river channel, remove 25 occurrences (0.5 net acres) of 6 primary invasive weeds: arundo, domestic almond, eucalyptus, Himalayan blackberry, tamarisk and tree of heaven. Convert seven acres of excess open water (gravel pit captured by the channel) to floodplain, restore natural meander form, pool-riffle sequence, functional floodplain elevations, salmon spawning habitat and native vegetation.
9	Lower Putah Creek Coord. Committee	MacQuiddy Channel Reconfiguration Feasibility Study	Determine feasibility to: restore 34 acres of riparian forest, reconfigure 3,800 feet of river channel, remove 44 occurrences (6 net acres) of 5 primary invasive weeds: arundo, eucalyptus, Himalayan blackberry, tamarisk and tree of heaven. Grade floodplain to functional elevation, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
10	Lower Putah Creek Coord. Committee	Mace to Road 106A Channel Restoration Feasibility Study	Feasibility study to restore 305 acres of riparian forest, reconfigure 2.7 miles of river channel, remove 124 occurrences (12.8 net acres) of 5 primary invasive weeds: arundo, milk thistle, pepperweed, tamarisk and yellow star thistle. Grade floodplain to functional elevation, convert 17 acres of excess open water to floodplain, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
11	Lower Putah Creek Coord. Committee	Nishikawa Channel Restoration Feasibility Study	Feasibility study to restore 37 acres of riparian forest, reconfigure 2,430 feet of river channel, remove 20 occurrences (1.36 net acres) of 6 primary invasive weeds: black locust, eucalyptus, pepperweed, tamarisk, tree of heaven and yellow star thistle. Grade floodplain to functional elevation, convert 3 acres of excess open water to floodplain, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
12	Lower Putah Creek Coord. Committee	Old Davis Road to Mace Channel Restoration Feasibility Study	Feasibility study to restore 190 acres of riparian forest, reconfigure 3.4 miles of river channel, remove 172 occurrences (5 net acres) of 9 primary invasive weeds: arundo, eucalyptus, fig, Himalayan blackberry, pepperweed, tamarisk, tree of heaven, tree tobacco and Virginia creeper. Grade floodplain to functional elevation, convert 27 acres of excess open water to floodplain, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
13	Lower Putah Creek Coord. Committee	Olmo-Hammond-UCD Channel Restoration Feasibility Study	Feasibility study to restore 109 acres of riparian forest, reconfigure 9,765 feet of river channel, remove 70 occurrences (2.5 net acres) of 9 primary invasive weeds: arundo, black locust, eucalyptus, Himalayan blackberry, pepperweed, tamarisk, tree of heaven, tree tobacco and yellow star thistle. Grade floodplain to functional elevation, convert 17 acres of excess open water to floodplain, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
16	Lower Putah Creek Coord. Committee	Restoria Channel Restoration Feasibility Study	Feasibility study to restore 93 acres of riparian forest, reconfigure 4,300 feet of river channel, remove 46 occurrences (3.2 net acres) of 6 primary invasive weeds: eucalyptus, Himalayan blackberry, pepperweed, tamarisk, tree tobacco and yellow star thistle. Grade floodplain to functional elevation, convert 2 acres of excess open water to floodplain, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
17	Lower Putah Creek Coord. Committee	Road 106A to Yolo Bypass Channel Restoration Feasibility Study	Feasibility study to restore 52 acres of riparian forest, reconfigure 6,000 feet of river channel, remove 42 occurrences (8 net acres) of 6 primary invasive weeds: arundo, eucalyptus, Himalayan blackberry, pepperweed, tamarisk and yellow star thistle. Grade floodplain to functional elevation, convert 11 acres of excess open water to floodplain, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
18	Lower Putah Creek Coord. Committee	Russell Ranch Channel Restoration Feasibility Study	Determine feasibility to: restore 50 acres of riparian forest, reconfigure 5,500 feet of river channel, remove 91 occurrences (2.75 net acres) of 8 primary invasive weeds: arundo, black locust, eucalyptus, fig, Himalayan blackberry, pepperweed, tamarisk and tree of heaven. Grade floodplain to functional elevation, convert 7 acres of excess open water to floodplain, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
19	Lower Putah Creek Coord. Committee	Stevenson Bridge Channel Restoration Feasibility Study	Feasibility study to restore 22 acres of riparian forest, reconfigure 2,100 feet of river channel, remove 29 occurrences (0.5 net acres) of 6 primary invasive weeds: arundo, eucalyptus, fig, Himalayan blackberry, pepperweed, and tamarisk. Grade floodplain to functional elevation, convert 1.5 acres of excess open water to floodplain, restore natural meander form, pool-riffle sequence, salmon spawning habitat and native vegetation.
20	Lower Putah Creek Coord. Committee	Thompson Canyon Bank Stabilization Design and Permits	This study provides plans, specifications and permits to restore 1.5 miles of Thompson Canyon at the confluence of Putah Creek, stabilizing a poorly engineered legacy road that caused a massive mud slide into Putah Creek in 1995; and subsequent smaller mud flows that annually degrade water quality and smother prime trout spawning habitat below Monticello Dam. The study would develop shovel-ready plans, specifications and permits.
21	Lower Putah Creek Coord. Committee	Upper McNamara Pool Channel Reconfiguration Feasibility Study	Determine feasibility to restore 30 acres of riparian forest, reconfigure 3,300 feet of river channel, remove 52 occurrences (4 net acres) of 7 primary invasive weeds: arundo, catalpa, domestic almond, eucalyptus, Himalayan blackberry, tamarisk and yellow star thistle. Convert five acres of excess open water (gravel pit captured by the channel) to floodplain, restore natural meander form, pool-riffle sequence, functional floodplain elevations, salmon spawning habitat and native vegetation.
22	Lower Putah Creek Coord. Committee	Warren Weed Control	Restore 11 acres of riparian forest, 1,700 of river channel, remove 26 occurrences (2 net acres) of 8 primary invasive weeds: arundo, black locust, catalpa, eucalyptus, Himalayan blackberry, milk thistle, tamarisk and yellow star thistle. One of the densest thickets of eucalyptus with over 300 trees averaging 24 inches in diameter.
33	Solano County Water Agency	Research on Hydrodynamics and WQ Interactions in the Delta.	The Sacramento - San Joaquin Delta is a complex array of streams, tidal channels, and estuary mixing with the San Francisco Bay. With large projects such as the Bay Delta Conservation Plan, restoration of thousands of acres of tidal marsh habitat as part of the Delta Biological Opinions, and others, there is a need to better understand the hydrodynamic and water quality interactions in the Delta. Such modeling and monitoring can help Delta users protect ESA species, improve water quality, and maintain water supply for municipal and agricultural users within the Delta.
35	Solano County Water Agency	Risk Assessment of Delta Water Supplies	This project would entail a risk assessment of Delta Water supplies, and would look at the impacts of unforeseen circumstances such as: Earthquakes, Delta levee failure, Sea level rise, and others as needed. The study would determine the risks and potential impacts to Delta water supplies such as the NBA. The project would inform and educate Delta and NBA water users.
38	Solano County Water Agency	Source water protection for Delta water sources	This project consists of various improvements such as best management practices, source water protection, and others to reduce the impact of point and non-point sources that could negatively impact Delta water quality, with a particular emphasis on drinking water quality.
39	Solano County Water Agency	Source water protection for Putah Creek watershed	This project consists of various improvements such as best management practices, source water protection, reduction of in-channel erosion, improved stream channel geomorphology, remediation of historic mining and others to reduce the impact of point and non-point sources that could negatively impact the Putah Creek watershed, as well as the Yolo Bypass.
40	RWMG with selected Lead Agency	Regional Invasive Plants, Aquatic and Terrestrial Weeds Management Plan	This project will include the formation of an Invasive Species Task Force/Subcommittee to prepare a Regional Invasive Species Management/Eradication Plan that documents the extent of invasive terrestrial and aquatic species within the Westside Region; evaluates existing programs to manage invasive species that could be leveraged, and identifies supplemental programs to be developed to fill gaps in existing programs to manage invasive species. The documentation phase will include review of existing GIS data and programs of local, state, and federal agencies, non-governmental organizations, and tribes. The Plan will include an implementation plan and indicate where coordination with other regional plans (e.g. Education Plan) is necessary. The Plan will be usable by all involved Regional agencies and could be expanded outside the Westside Region at a future date. This project could replace/incorporate LPCC - #2,3, 5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22; SCWA - #27 and 32 LCWRD - #74, YCRCD - #127,

# Westside SAC IRWM Projects for Yolo SWRP Consideration

Project No.	Lead Agency Organization	Project Title	Project Description Briefly describe the project in 300 words or less
43	Solano County Water Agency	Wetland Restoration Research and Impacts to Source Water Quality.	The project will consist of scientific study/research on wetland restoration, organic carbon generation, and other important areas of study, to determine the corresponding impacts on municipal source water quality. The study will address many of the concerns associated with large scale wetland restoration in the Suisun Marsh and Cache Slough Complex.
45	City of Woodland / floodSAFE Yolo	Lower Cache Creek Flood Risk Reduction Project	The primary purpose for the Project is to reduce the risk of flooding to the City of Woodland and adjacent land including the rural Town of Yolo and Interstate 5. The Project is part of the flood management element of the Cache Creek Integrated Project presented in the Yolo County IRWMP that was adopted by the WRA in July 2007. The features of the State Plan of Flood Control afford a nominal 10-year level of protection and the City, in keeping with the legislative intent of FloodSAFE California, will be seeking 200-year protection. The Project is in the initial phases of a feasibility study for which the City has executed a Federal cost share agreement with the USACE and CVFPB and a non-federal cost share agreement with the CVFPB. In striving to maintain the integrity of the IRWMP features for environmental enhancement and recreation will be investigated. Implementation of the feasibility study and project construction will be performed in concert with implementation of the CVFPB.
52	Cache Creek Conservancy	Implementation of the Cache Creek Resources Management Plan	This proposal will implement projects within the Cache Creek Resources Management Plan (CCRMP) area, located along 15 miles of lower Cache Creek from the Capay Dam to the town of Yolo. The Cache Creek Conservancy (CCC) has been working in this area for fifteen years, focusing on removal of non-native invasive plant species along with revegetation efforts at specific sites. The CCC also manages the Cache Creek Nature Preserve, a 130 acre area owned by Yolo County, which includes wetlands, oak woodlands, and the riparian corridor. This area is open to the public and serves as the site of our environmental education program, outreach activities for people of all ages, Native American gathering garden, and research projects. The proposed project consists of various phases of these activities that may meet specific grant requirements such as habitat restoration or enhancement, streambank stabilization, invasive plant removal, monitoring, and/or watershed stewardship through education, workshops, and outreach to landowners. The CCC works closely with partners including Yolo County and the Yolo County RCD.
54	City of Davis	Wastewater Treatment Plant Secondary and Tertiary Improvements	The City owns and operates the Davis WWTP, which is located east of the City limits at 45400 County Road 28H in Yolo County (Figure 1-1 and Figure 1-2). The wastewater treatment system at the WWTP consists of a mechanical bar screen, an aerated grit tank, two aeration ponds (typically used in winter), three facultative oxidation ponds, a lemna pond, an overland flow system, a chlorine disinfection system, and restoration wetlands. Solids collected from the primary sedimentation basin are treated in an anaerobic digester and then are dewatered in three on-site sludge lagoons. Treated solids are land applied on the City's overland flow slopes and the upland areas of the restoration wetlands. Treated effluent is discharged to the Willow Slough Bypass (Discharge Point 001) and/or through the Davis restoration wetlands to the Conaway Ranch Toe Drain (Discharge Point 002), both of which are considered Waters of the United States under the Clean Water Action and tributary to the Yolo Bypass. The City received a renewed permit for its discharge of treated effluent to the Willow Slough Bypass and Conaway Ranch Toe Drain on October 25, 2007. To maintain its surface water discharge, the Permit requires the City to meet new stringent effluent limitations within ten years of adoption of the Permit. To meet the new limit, the City has determined it necessary to cease its surface water discharge to Willow Slough, all or in part, through upgrades to its existing treatment process to provide for tertiary treatment. The City has until October of 2017 to implement a project to meet the new permit requirements. The proposed project is being developed in response to these new discharge requirements.
76	RWMG with selected Lead Agency	Regional Invasive Mussels Management Plan	This project will include the formation of an Invasive Species Task Force/Subcommittee to prepare a Regional Invasive Mussels Species Prevention Plan that evaluates existing programs to prevent invasive species that could be leveraged, and identifies supplemental programs to be developed to fill gaps in existing programs to manage invasive species. Special high priority emphasis will be placed on prevention of water body infestation by Quagga Mussels. The documentation phase will include review of existing GIS data and programs of local, state, and federal agencies, non-governmental organizations, and tribes. The Plan will include an implementation plan and indicate where coordination with other regional plans (e.g. Education Plan) is necessary. The Plan will be usable by all involved Regional agencies and could be expanded outside the Westside Region at a future date. This project could replace/incorporate LPCC - #2,3, 5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22; SCWA - #27 and 32 LCWRD - #74, YCRCD - #127,
81	Tuleyome, Inc.	Comprehensive Mercury Assessment and Implementation for the Westside Region	Key Activities (generally in chronological order): <ul style="list-style-type: none"> <li>• Compile and georeference existing maps, technical reports, land use and planning documents, hydrology and water quality data (e.g., flow rates, mercury and sediment concentrations, fish tissue mercury) and other information characterizing known and potential mercury priority areas (e.g., unmaintained roads, hillsides, streambanks and debris dams, mercury mines, mineral springs, surficial soil mineralogy, atmospheric deposition, and point sources) in the Westside Region.</li> <li>• Monitor mercury biosentinels and fine-grain streambed sediments in the Putah Creek Watershed to identify tributary "hot spots", implemented using methods comparable to monitoring performed in the Cache Creek and Clear Lake watersheds and consistent with Surface Water Ambient Monitoring Program protocols.</li> <li>• Upload relevant information into a regional or statewide on-line library such as SWIM (<a href="http://srwp.org/imf/imf.jsp?site=SWIM">http://srwp.org/imf/imf.jsp?site=SWIM</a>) for reports and CEDEN for water data.</li> <li>• Synthesize existing information and produce a "lessons learned" summary.</li> <li>• Develop a Best Management Practices Toolkit for addressing mercury concerns in relevant watershed management projects.</li> <li>• Work with land managers and other stakeholders to develop customizable decision-support tools that allow users throughout the Westside Region to (1) visualize mercury source areas,(2) catalog relevant data and other information spatially, (3) highlight priority areas for additional regional or local mercury control studies, and (4) identify cost-effective mercury reduction projects.</li> <li>• Identify 2-3 feasible priority projects and develop implementation measures using the Toolkit and decision-support tools.</li> <li>• Support and contribute to relevant state regulatory programs addressing mercury pollution (fish tissue objective, statewide reservoirs TMDL, trading policy and pilot projects).</li> <li>• Communicate and engage with landowners and other stakeholders in the region</li> </ul>
83	West Sacramento Area Flood Control	Lower Sacramento and Delta North Regional Flood Management Plan	The Central Valley Flood Protection Plan (CVFPP) calls for State of California Department of Water Resources (DWR) to work with local flood management agencies to prepare detailed Regional Flood Management Plans (RFMP) that, at a minimum, identify and articulate the following: <ul style="list-style-type: none"> <li>• Describe flood management challenges and deficiencies at the regional level including operations and maintenance practices, levee and channel inspection, and emergency response plans.</li> <li>• Propose potential solutions/projects identified by local public agencies and interest groups for the region, estimated costs for projects, prioritization of the solutions/projects, enhanced operations and maintenance, emergency response, and floodplain management.</li> <li>• Propose financial strategies that identify benefits of the projects and sources of the funding for implementation of the projects.</li> </ul> The CVFPP promotes the State's System-wide Investment Approach (SSIA) for sustainable, integrated flood risk management in areas currently protected by facilities of the State Plan of Flood Control. The purpose of the regional planning effort is to build upon the CVFPP by obtaining more region-specific information and local input for long term implementation of a sustainable and integrated flood risk reduction program in the Central Valley. The plan formulation process will document site-specific flood system improvement needs, ensure local public agencies' involvement in developing their region's long-term vision for flood management, and prepare strategies for implementation over the long term (next 25 years or so) to achieve the region's vision for significantly reducing flood risks.
84	Yolo County Flood Control and Water Conservation	Winters Main Canal Modernization Project: Integrated Precision Water Mgmt.	Through the installation of automatic water control gates, pump flow meters and vegetated native grass canal banks, the District will modernize 16 miles of its main canal in an integrated, environmentally friendly way. The automatic water control gates will allow the District to operate its main system with more flexibility, thereby allowing the District and its water customers to manage their irrigations in a more efficient manner and achieve water conservation benefits. Planting the canal banks with native grasses will minimize erosion and improve water quality while also providing habitat value for wildlife. Additionally, converting from the use of a spray program to control undesired weeds, to native grasses will allow the District to limit the use of herbicides.

## Westside SAC IRWM Projects for Yolo SWRP Consideration

HANDOUT #5

Project No.	Lead Agency Organization	Project Title	Project Description Briefly describe the project in 300 words or less
85	Yolo County Flood Control and Wa	Abandoned Well Incentive Program	<p>The Westside Regional Water Management Group would like to create a grant funded Abandoned Well Incentive Program. The Incentive program would pay for the proper destruction of old, abandoned wells. Currently hundreds, or possibly thousands, of abandoned wells in the Westside Region have not been properly destroyed, allowing low quality water to travel to higher quality zones.</p> <p>Current county ordinances and State water well construction standards mandate that unused wells be destroyed to protect groundwater quality. However, properly destroying a well can be expensive and in practice, many wells are not destroyed. Many wells were abandoned decades ago with the responsible party long gone. Additionally, there is no staff or program in place to enforce the ordinances and there is no "master list" of wells to look up. The current location of abandoned wells is unknown.</p> <p>The Westside RWMG feels the best way to find and properly destroy abandoned wells is to have private landowners step forward and enroll these wells in a Well Incentive Program. The incentive to enroll is that the program will pay for the proper destruction by licensed C-57 well contractors.</p> <p>The RWMG proposes a 3 year program, with one full time project manager, for approximately \$2.2 million. Local Farm Bureaus would collect names of participants, and local well contractors would perform the work. We hope to properly destroy up to 500 wells, as funding permits.</p>
86	Yolo County Service Area #6	County Service Area (CSA) #6 Levee Repair Project	<p>The CSA #6 Levee Repair Project is a subset of the Mid-Valley Area Levee Reconstruction Project currently underway through a partnership between the U.S. Army Corp of Engineers and the Central Valley Flood Protection Board.</p> <p>This is a non-urban levee repair project that consists of one site with the combined length of 1.108 Miles located along the landside of the CSA #6 levee.</p> <p>The repair of these three sites would complete the levee rehabilitation identified to restore the District levee to its authorized level of flood protection as established for the Sacramento River Flood Control Project. The repairs include removing expansive clay materials used to construct the levees with a material the meets the Corps guidelines and to construct landside berms that will prevent further sloughing</p>
94	Lake County Water Resources Dep	Increase Cache and Putah Creek Watershed Education and Outreach	<p>Develop and improve education programs that provide public with information on watershed programs and related proper management techniques. This program will build on existing water education materials from sources including government agencies, the WET Program and the Water Education Foundation to create a broad education program suitable for students, involved government agencies and the general public. It will cover general principals of watershed management, good environmental stewardship, proper use of area recreational resources, proper management of area water bodies, what homeowners, businesses, and government can do to promote good management, and other related topics. It will be designed to be usable by all involved Regional agencies.</p>
96	Knights Landing Ridge Drainage D	Mid Valley, Knights Landing Repair Project	<p>Subset of the Mid-Valley Area Levee Reconstruction Project currently underway through a partnership with ACOE and the Central Valley Flood Protection Board.. Non-urban levee Repair</p>
97	Lake County Water Resources Dep	Form Task Force/Subcommittee to strategize and implement Watershed Education and Outreach	<p>Support appointment of Education Task Force/Subcommittee to prepare a Regional Watershed Education Plan for a 2-year implementation period. The Education Plan identifies the breadth and depth of the educational need within the Westside Region; evaluates existing programs that meet the educational needs that could be leveraged, and identifies supplemental education and/or incentive programs to be developed to fill gaps in existing programs that provide both K-12 and the general public with information on watershed programs and related proper management techniques. The Plan will include an implementation plan for a 2-yr duration after plan development. Specific target areas for education may include: urban and agricultural water use efficiency, aquatic invasive species especially with relationship to recreation, stormwater quality best management practices for homeowners, businesses, and government, general public education around OHV use and water quality, algae blooms, etc. as well as general principals of watershed management and proper management of area water bodies. The identification phase will include review of existing water education materials and implementation programs from sources including government agencies, non-governmental organizations, tribes, the WET Program and the Water Education Foundation. The Plan will be usable by all involved Regional agencies. After the 2-yr implementation period, the plan will be evaluated and updated. (this project could replace/incorporate Lake Co specific project, as well as #130 of Putah Creek Council and #131 of Yolo Basin Foundation)</p>
110	Woodland-Davis Clean Water Agen	Davis-Woodland Water Supply Project	<p>The Davis-Woodland Water Supply Project (DWWSP) was one of the integrated actions contained in the adopted 2007 Yolo County IRWMP, and is on the WRA Project Priority List approved by the WRA Board in 2011. The Woodland-Davis Clean Water Agency (WDCWA) was formed in 2009 to design and construct the DWWSP to deliver up to 40 mgd of treated surface water to the cities of Woodland and Davis, and UC Davis by 2016. The project improves drinking water quality and reliability to over two-thirds of the urban population in Yolo County. The project EIR has been prepared and adopted which identified the DWWSP as the most environmentally superior water supply alternative for the partners to pursue. A majority of project permitting and land acquisition activities are now completed.</p> <p>The project is comprised of four regional facility components: (1) a joint RD 2035/WDCWA Sacramento River Intake facility (up to 80 cfs capacity for the WDCWA); (2) 4.5 mile raw water pipeline(s) to convey untreated surface water to a water treatment facility; (3) a regional water treatment facility to treat the surface water before delivery; and (4) 10 miles of treated water pipelines to deliver treated water to local water systems. There are local facility costs each entity would finance and construct to facilitate the delivery of treated surface water directly to their customers. The total project cost estimate is \$293 million dollars. Initial project costs could be lower depending on project delivery capacity at start-up.</p> <p>The DWWSP includes investments in surface water supplies for water right permits (up to 45,000 acre-feet per year) and summer water purchases (up to 10,000 acre-feet per year) that will provide year around surface water for the communities relying on the project as a primary water supply. Part of the investment in project water supplies includes the design and construction of Aquifer Storage and Recovery (ASR) facilities that would allow the future storage of permit surface water supplies to improve overall project reliability.</p> <p>The joint WDCWA/RD 2035 Sacramento River Intake facility will be ready for construction in 2013. The new joint Intake facility will be equipped with a state-of-the-art fish screen to protect future fishery populations in the Delta watershed. This would be a high priority regional facility to move forward on once all project funding has been secured. The DWWSP also meets several of Westside IRWMP goals and objectives.</p>
111	West Sacramento Area Flood Cont	Deep Water Ship Channel East Levee Repair	<p>Correct deficiencies, protect against underseepage, and maintain the Port of West Sacramento levees to current standards for FEMA 100 yr and urban levee 200 year levels of flood protection. Physical improvements may include, but not be limited to, restoration and armoring of water-side levee slopes, slurry cutoff walls in the levee prism, etc.</p>
112	West Sacramento Area Flood Cont	Deep Water Ship Canal Navigation Levee Repair	<p>Correct deficiencies, protect against underseepage, and maintain the Deep Water Ship Canal Levees to current standards for FEMA 100 yr and urban levee 200 year levels of flood protection. Physical improvements may include, but not be limited to, restoration and armoring of water-side levee slopes, increased levee height through crown raising or crown-top walls, slurry cutoff walls in the levee prism, seepage blankets on the levee land-side, levee setbacks, etc.</p>
113	West Sacramento Area Flood Cont	Port of West Sacramento North and South Levee Repair	<p>Correct deficiencies, protect against underseepage, and maintain the Port of West Sacramento levees to current standards for FEMA 100 yr and urban levee 200 year levels of flood protection. Physical improvements may include, but not be limited to, restoration and armoring of water-side levee slopes, slurry cutoff walls in the levee prism, flood walls, etc.</p>
114	West Sacramento Area Flood Cont	Sacramento River Levee Repair	<p>Correct deficiencies, protect against underseepage, and maintain the Sacramento River Levees to current standards for FEMA 100 yr and SB 5 200 year levels of flood protection. Physical improvements may include, but not be limited to, restoration and armoring of water-side levee slopes, increased levee height through crown raising or crown-top walls, slurry cutoff walls in the levee prism, seepage blankets on the levee land-side, levee setbacks, etc.</p>
115	West Sacramento Area Flood Cont	Sacramento River Recreational Trail	<p>Construct a continuous 13.1 mile, 192-acre recreation corridor along the entire length of the Sacramento River within City limits. Improvements will consist of paved and un-paved trail surfaces, vehicular staging areas and access controls, and location-based amenities ranging from major community parks (e.g., River Walk Park, River Walk Trail, Riverfront Promenade) to occasional experiences (e.g., picnic tables, trash/recycling receptacles, information kiosks, drinking fountains, shade structures, landscaping, viewing areas, bank fishing access, etc.). Improvements will be phased according to available funding and other opportunities</p>
116	West Sacramento Area Flood Cont	Sacramento Bypass-Yolo Bypass Levee Repair Phase II	<p>Correct deficiencies, protect against underseepage, and maintain the Sacramento Bypass and Yolo Bypass Levees to current standards for FEMA 100 yr and urban levee 200 year levels of flood protection. Physical improvements may include, but not be limited to, restoration and armoring of water-side levee slopes, increased levee height through crown raising or crown-top walls, slurry cutoff walls in the levee prism, seepage blankets on the levee land-side, levee setbacks, etc.</p>
117	West Sacramento Area Flood Cont	West Sacramento South Cross Levee Repair	<p>Correct deficiencies, protect against underseepage, and maintain the West Sacramento South Cross Levee to current standards for FEMA 100 yr and urban levee 200 year levels of flood protection. Physical improvements may include, but not be limited to, restoration and armoring of water-side levee slopes, increased levee height through crown raising or crown-top walls, slurry cutoff walls in the levee prism, seepage blankets on the levee land-side, levee setbacks, etc.</p>

# Westside SAC IRWM Projects for Yolo SWRP Consideration

Project No.	Lead Agency Organization	Project Title	Project Description Briefly describe the project in 300 words or less
118	Yolo County Flood Control and Wa	Conjunctive Water Use Program	This conjunctive water use project envisions using a variety of methods (recharge/recovery, off-stream storage and canal system modernization) to effectively store and conjunctively use groundwater in the District's service area. The new water that will be developed can be used to the benefit of agriculture, environmental and municipal interests. A significant amount of work has already been completed on this project including establishment of a groundwater monitoring program, development of a regional groundwater model, and preliminary investigations into associated water rights, engineering, economic, and environmental issues.
120	Yolo County	Yolo County Airport Drainage Plan	The Yolo County Airport, located just West of Davis, consists of 498 acres being used as a publicly owned general aviation airport. Prior to downstream drainage changes restricting the outlet at the southeastern corner of the property, on-site runoff caused only minor flooding. Now, however, areas on the east side of the property flood during certain storm events. Flooding in the low-lying areas occur fairly regularly. In order for the airport to eliminate flooding of its facilities and to expand, a 2005 Drainage Plan engineered by Wood Rogers needs to be implemented.
121	Yolo County	Analysis of BDCP's Yolo Bypass Conservation Measure and Other Measures	As a result of Biological Opinion requirements and science indicating benefits of flooding the Yolo Bypass for fish habitat, the November 2010 Bay Delta Conservation Plan (BDCP) Working Draft proposed a conservation measure that includes, among other things, modification of the Fremont Weir and possibly other structures to increase the frequency and duration of flooding in the Yolo Bypass. In response to this draft and earlier iterations of the conservation measure, Yolo County requested an analysis of the impacts of the conservation measure, including flood protection impacts. Given the importance of the Yolo Bypass in protecting the Sacramento area from flooding, the Sacramento Area Flood Control Agency (SAFCA) has joined Yolo County (the "partners") in seeking an analysis of the potential flood protection impacts of the conservation measure. In addition, the partners are interested in evaluating measures that would be compatible with the BDCP's fish habitat enhancements and would improve the flood conveyance function of the Bypass.
122	Yolo County, Natural Resources Di	Cache Creek Parkway Plan	The Cache Creek Parkway Plan is in the early stages of development. Once complete the Plan will result in a comprehensive planning document that will guide the restoration and ultimate uses of County owned lands within the Cache Creek Area Plan boundary. The Plan will leave the citizens of Yolo County with a legacy of open space parks and nature preserves along Cache Creek and will provide well-managed opportunities for public access, education, and recreation. The Parkway Plan will provide a detailed vision and integrated management plan for all of the properties (1,537 acres total), plus any others accepted or purchased for management under the Cache Creek Area Plan (gravel) program. The Plan will: 1. Establish guidelines and specifications for development, access, use, and management of each property, and the development of a recreational trail system in coordination with the Yolo County Parks Master Plan. 2. Provide a framework for the County in negotiations over land dedications associated with future Development Agreements and mining applications. 3. Provide guidance regarding additional lands to target for acquisition in order to provide connectivity and continuity throughout the parkway area. 4. Lay the foundation for a mechanism to provide long-term financing and maintenance of the parkway system through collaborative efforts among the Natural Resources Division, Parks Division, Cache Creek Conservancy, and other partners.
123	Yolo County	Clarksburg Flood Protection Feasibility Study	The project involves conducting a feasibility study of alternatives to provide a 100-year level of flood protection to the Clarksburg region, located largely in the primary zone of the Sacramento River Delta within the County of Yolo (a small portion of the region is located in the secondary zone). The study will also include analysis of alternatives for interim flood management solutions to protect areas suitable for the development of agricultural processing facilities. Yolo County will work with Reclamation District 999 and contract with outside technical experts to undertake this study.
124	Yolo County Parks	Lower Cache Creek Campground and Habitat Restoration	The project involves the construction of approximately 9 new camp sites and potentially 9 rural campsites at the Yolo County Lower Cache Creek Park site as well as restoration of significant riparian and upland environments. The project also proposes to install a park host space, a water well to support the parks host, park visitors and newly planted restoration.
125	Yolo County	Methylmercury Impacts Analyses for the Yolo Bypass	Full Name of Proposed Project: Methylmercury Impacts Analyses of the Proposed Yolo Bypass Fisheries Enhancement Project and Yolo Bypass Expansion Project Yolo County proposes to collect data and analyze changes in methylmercury production and bioaccumulation that could result from (1) a proposed Bay Delta Conservation Plan (BDCP) project to enhance fisheries habitat in the Yolo Bypass; and (2) a Central Valley Flood Protection Plan proposal to expand the Yolo Bypass to improve flood capacity. Both projects may increase the methylmercury levels in fish tissue and increase related health risks for humans and wildlife. Based on this work and the County's ongoing coordination with the Nonpoint Sources Workgroup, Yolo County will help identify and describe management practices that could minimize methylmercury production and loads from the proposed projects. This proposal builds on previous successful collaborative efforts by Yolo County in the last year to study the agricultural impacts of BDCP-related proposals to enhance fisheries habitat in the Yolo Bypass. Yolo County proposes to work closely with California Department of Water Resources staff responsible for Department's compliance with the 2011 Delta Methylmercury Total Maximum Daily Load (TMDL). With financial support from the State and Federal Contractors Water Agency, Yolo County has already demonstrated that it can objectively analyze proposed Yolo Bypass projects at a low cost and with effective stakeholder outreach. A Yolo County partnership with the state on methylmercury issues will benefit the state, County, and local stakeholders.
126	Yolo County Resource Conservatio	Implementation of the Cache Creek Watershed Invasive Weed Management Plan	The newly completed Cache Creek Watershed Invasive Weed Management Plan (CCW-IWMP), a living document, identifies specific invasive plants for either eradication, containment or monitoring and prioritizes weeds within those categories. Starting in the upper watershed and working downstream we will use weed mapping information to eradicate those which can be eradicated, contain the edges of those identified in that category, and monitor so as to continually update the plan and re-prioritize and implement vegetation management actions.
127	Yolo County Resource Conservatio	Agricultural Drain, Slough and Canal Riparian Habitat Enhancement	Control of invasive weeds, site preparation, installation of native trees, shrubs, grasses and/or forbs as appropriate to the site, and 2 years of vegetation management/ maintenance post-plant along natural and man-made waterways, with focus on Cottonwood, Union School, Willow and Chickahominy sloughs; and main irrigation supply canals in western Yolo County.
129	Putah Creek Council	Native Plant Nursery to Support Putah-Cache Ecotype Restoration	In cooperation with Lower Putah Creek Coordinating Committee, Putah Creek Council (PCC) will manage a native plant nursery to grow Putah Creek plants from wild-collected seeds and cuttings at a nursery at the LA Moran Reforestation Center, Davis. The plants grown in the nursery will be available to projects in the bio-region for riparian and upland restoration projects. Any given species of plant has immense genetic variation from one region to the next. Using plants which are grown from local genetic stock ensures the highest success rate of the plants, and best outcomes for water quality and wildlife habitat. This project would enable Putah Creek Council to expand the diversity of plants grown at the facility and made available to local restoration projects. Work at the nursery will rely on interns who will receive green jobs training, and community volunteers from local communities. Elements include: UPGRADING EDUCATION FACILITIES: Putah Creek Council currently runs a modest education program at the nursery facility. In the past year, 275 community members volunteered at the facility. With modest investment, we would be able to increase the opportunity for volunteers to learn about water management via educational signs throughout the facility. SEED and CUTTING COLLECTION: We will collect materials throughout the year to grow into container stock used on local restoration projects. The stock is currently limited to plants which are easy to grow, but additional funding would allow us to expand our diversity via collecting seeds from less-common plants. PUBLIC ENGAGEMENT: Most of the labor involved in raising our native plants is accomplished by volunteers. This project connects many of the other habitat-focused projects by allowing community members to engage in every aspect of watershed restoration.

# Westside SAC IRWM Projects for Yolo SWRP Consideration

Project No.	Lead Agency Organization	Project Title	Project Description Briefly describe the project in 300 words or less
130	Putah Creek Council	Pollution Prevention and Watershed Education Project	<p>Putah Creek Council (PCC) will educate Winters students, residents, and visitors about storm water and urban runoff, watershed function, and wildlife habitat along Putah Creek via our "Pollution Prevention and Watershed Education" project. Elements include:</p> <p><b>ADOPT A FLAT:</b> PCC will provide standards-based science curriculum to fourth-grade students on topics including native plants, water quality, and wildlife habitat. Students grow native grasses and sedges in class.</p> <p><b>FIELD TRIP--Habitat:</b> PCC and with City of Winters staff will the underground path of storm water from the local school to the storm water outflows into Putah Creek. Students will follow this path to understand how trash and runoff make their way into the creek. Students will plant student-grown sedges and grasses at the outflows to filter contaminants from the urban runoff.</p> <p><b>FIELD TRIP--Trash pickup:</b> Students will pick up trash around the stormwater outlet, and along the banks of Putah Creek in Winters. Students will tally the results of the trash collected via the International Coastal Conservancy's protocol. Students will put the trash into steel-mesh bins which will be placed on a flat-bed at a high-visibility intersection in Winters, with student-designed signage about urban runoff and water pollution. This trash exhibition will coincide with public notice about the project (see below)</p> <p><b>ART:</b> Students will participate in a student art competition about how to prevent storm water pollution. Winning entries will be made into semi-permanent signs to be erected at four sites along the ADA-accessible Winters Putah Creek pathway. The signs will be changed annually via the class participation and a contest on a rotating topic each year. Topics may include: water conservation, invasive species, watershed function, and water quality.</p> <p><b>PUBLIC ENGAGEMENT:</b> The public will be notified about student efforts via the City of Winters newsletter, published monthly, and distributed with water bills.</p>
132	Yolo Basin Foundation	Lower Putah Creek Restoration from Toe Drain to Putah Creek Diversion Dam (Yolo Bypass Wildlife Area Element)	<p>The project will enhance and restore 300-700 acres of tidal freshwater wetlands and create 5 miles of a new creek channel, entirely within the Yolo Bypass Wildlife Area. This will improve anadromous fish access to 25 miles of stream, Connectivity created between these habitats will enhance salmonid in-migration and spawning, as well as rearing and outmigration conditions for smolts. The project will enhance habitat within Lower Putah Creek to support the recovery of local fall-run Chinook salmon, steelhead, and Sacramento splittail populations. The restored landscape of tidal, fluvial, and riparian habitats will benefit a broad range of special-status plants and wildlife.</p> <p>The project will restore hydrologic/hydrodynamic and other physical processes that support the tidal, fluvial, and riparian habitats needed by native species and biotic communities; establish a more natural hydrograph within Lower Putah Creek: re-engineer the creek floodplain so that target special-status fish species will have increased accessibility to the habitats they need for foraging and reproduction at lower flows; and restore tidal action to habitats that were historically tidally inundated. The project will engineer a fish bypass channel that can be completely drained in the summer, after all outmigrating smolts have left the creek channel. This will minimize or prevent establishment of populations of non-native, predatory fish such as striped bass and largemouth bass in the channel, and thereby decrease predation on salmonid smolts and other special-status species.</p>
135	Reclamation District 2035	Tule Canal Habitat Enhancement & Sediment Removal	<p>The project consists of:</p> <ol style="list-style-type: none"> <li>1. Securing an environmental easement that would protect valuable floodplain habitat and adjacent lands from other uses;</li> <li>2. Construction of operational facilities for water control and fish passage;</li> <li>3. Regrading portions of the floodplain habitat to increase the quality of seasonally inundation based on managed flows from the Sacramento River.</li> </ol>
136	Reclamation District 2035	Levee Repairs/Maintenance- Segments 150, 173 and 297	Complete geological analysis, engineering design required to identify and correct levee deficiencies and hazard mitigation recommendations contained in the URS levee evaluation report (2010) completed at the direction of the Department of Water Resources and additional geologic investigation analysis (to be completed) recommendations.
139	Reclamation District 2035	Floodway Corridor Project	<p>The project consists of three major phases/components:</p> <ol style="list-style-type: none"> <li>1. Acquisition of Conservation/Flowage Easements - Approx. 7,000 acres.</li> <li>2. New Sacramento River By Pass - A new bypass facility will be constructed to divert flows from the Sac River to the Yolo Bypass. During large storm events flood flows would be diverted (Sac River) over a new weir to a new bypass channel that would deliver flows to the Yolo Bypass.</li> <li>3. Diverting additional flood flows in to the Yolo Bypass would increase flow and stages in the bypass downstream from the new bypass. To mitigate for potential flow increases, a portion of Conaway Ranch (outside of the Bypass), would be used to convey and store (transitory storage of over 66K acre feet) of flood water during large storm events.</li> </ol> <p>The project will significantly improve the flood control performance of the State-Federal Flood Control System while preserving agricultural use, enhance flood protection corridors while preserving and providing an opportunity to enhance wildlife values and establish a bypass that would provide improved flood protection.</p>
140	Reclamation District 2035	Cross Bypass Canal Modernization	The project consists of piping (or lining) the Cross Bypass Canal and the installation of flow control and measurement devices to improve the conveyance system and increase water use efficiency.
141	Reclamation District 2035	Conjunctive Use Study	<p>The project consists of the study and analysis of the coordinated use of surface and groundwater that could benefit the agricultural, urban, and environmental interests within, nearby and downstream of Yolo County, especially the North Delta region.</p> <p>The project includes seven main elements: 1. Data Collection, 2. Data Analysis and Management, 3. Field Studies and Testing, 4. Development of Operational Alternatives, 5. Model Development, 6. Preparation of a comprehensive GWMP Update, 7. Implementation Management, Environmental Considerations and Outreach</p>
143	RWMG with selected Lead Agency	Regional Capital Improvement Plan	Create Regional asset management plan to identify and prioritize key water management infrastructure.
144	Reclamation District 999	Elk Slough Groundwater Quality Improvement and Flood Protection Project	<p>Elk Slough is the surface water recharge source for the sole-source shallow aquifer providing drinking water for residents of the Delta community of Clarksburg. The slough is currently closed to the fresh water of the Sacramento River and is maintained by tidal inflows from Sutter Slough. Elk Slough water quality is typically similar to that of the river; however, when salinity intrusion increases during droughts, the slough water quality declines.</p> <p>Proposed salinity barriers, Delta Cross Channel reoperations, and Freeport intake operations work in concert to significantly backwater Elk Slough and reduce freshening tidal inflows. An operable gate at the slough head would allow for a limited amount of Sacramento River water (less than 5 cfs) to maintain water quality and improve drinking water recharge. This would reverse salinity intrusion and potentially mitigate for other conveyance and salinity intrusion actions in the Delta. The operable gate would also provide for fish passage and protect approximately 19 miles of at-risk levees within Yolo County. Proposed activities enhance and maintain a riparian and flood protection corridor, establish long-term multi-species wildlife habitat conservation area, and restore natural fluvial and slough biological processes.</p> <p>Project phases include completion of field investigations assessing existing ecological and geotechnical conditions, a topographic survey, preliminary engineering and alternative designs; preparation and submission of a CEQA document, and associated permits; selection of final designs, development of construction documents, development of bid documentation; and project bidding and construction.</p> <p>The project intends to improve groundwater conditions to secure local drinking water supplies from drought conditions; improve riparian and aquatic habitat; reduce community conflict over proposed salinity and other water operations by maximizing recharge quality given hydrologic conditions. This is the first component of a larger project to establish flood gates, flood easements, and relocate or modify existing structures on Elk Slough.</p>
146	City of Woodland	Well 29 ASR Project	<p>The project involves the design and construction of a new municipal aquifer storage and recovery (ASR) well near the site of the existing Well #10 on City owned property. The new ASR well will facilitate groundwater recharge by injecting treated surface water into the gravel layer approximately 470 feet down from the surface when surplus Sacramento River water is available during winter. The ASR well water would be pumped from the ASR well to supplement surface water during drought conditions. ASR also has long-term water quality benefits because, over time, injected water replaces native groundwater impaired by nitrate and naturally occurring metallic species, including arsenic, hexavalent chromium, manganese, and selenium, with better-quality water.</p> <p>The intent is to inject water into the ASR well each winter and build a large reservoir of treated surface water beneath the well and utilize the water primarily during drought years. The project removes a high capacity groundwater extraction well from the regional aquifer and replaces it with a well that will promote groundwater recharge and sustainability while improving Woodland's water supply reliability during a drought.</p> <p>City recently completed construction and full scale ASR feasibility testing of Well 28. The feasibility testing was a success and indicates that ASR technology would be successful in Woodland. The new ASR well would include the ability to inject treated surface water at a rate of approximately 1,000 gpm and extract water at a rate of approximately 1,500 gpm. The new ASR well is considered a Categorical Exemption under CEQA as it is a replacement of an existing water supply facility. The existing well will be properly destroyed. The Well 28 design would be replicated for the new well to minimize design time and costs and provide identical ASR well facilities for Woodland.</p>

## Westside SAC IRWM Projects for Yolo SWRP Consideration

Project No.	Lead Agency Organization	Project Title	Project Description Briefly describe the project in 300 words or less
151	Yolo County Flood Control and Wa	Regional Drought Preparedness through Increased Groundwater Recharge	<p>The District proposes to divert winter flows from Cache Creek into the canal system to increase groundwater recharge. Groundwater recharge and recovery is central to good conjunctive management of surface and groundwater resources. Currently, by District policy, 160 miles of surface water canals remain unlined, providing summertime groundwater recharge services that benefit the aquifer and riparian habitat. The recharged groundwater is used by farmers, individual well owners and business, cities, and small communities. Normally, the majority of canal recharge occurs in the summertime, during the irrigation season. This project proposes to divert wintertime water into the canal system which would require the installation of automated canal gates to replace manual gates. This project will improve local water supply reliability during times of drought and improve conjunctive use management overall.</p> <p>The District has been building and planning improvements to its conjunctive use system for many decades. The regionally supported groundwater monitoring program is extensive. The ag/urban partnership between the cities of Davis, Woodland, and Winters and the Water District is strong. Indeed, the Cities depend on the recharge activities of the District to maintain their water supplies. The disadvantaged communities (DAC) in the western half of the District also depend exclusively on groundwater.</p> <p>The installation of automated gates to make winter recharge possible will increase groundwater storage and will benefit the community for years to come.</p>
160	City of Davis	Parks and Greenbelts Irrigation and Landscape Upgrades	<p>The goal of the project is to increase water use efficiency and reduce overall water use in City parks and greenbelts. This will involve converting less used turf areas along greenbelts and in parks to lower water use plants to reduce irrigation needs, the conversion of irrigation in non-turf areas to drip, and the replacement of sprinkler heads and irrigation controllers to increase efficiency. The project will also include converting wells that are currently used for potable water uses to irrigation (non-potable) wells that will supply local parks and greenbelts. The project will also provide some stormwater quality benefits with less water runoff in areas that have been converted to drip irrigation.</p>
162	City of Davis	Drainage Channel Feasibility Study	<p>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.</p>
163	City of Davis	Retention Pond Feasibility Study	<p>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.</p>
164	City of Davis	Russel Boulevard Demonstration LID Project	<p>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 stromwater 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.</p>
168	Davis Joint Unified School District	Harper Junior High Water Conservation Improvements	<p>Frances Harper Junior High School presents a unique opportunity for water conservation through education and the creation of outdoor classrooms. The school serves over 600 students in grades 7 to 9. Located on East Covell Boulevard in Davis, the property is a 45-acre parcel with about 23 acres in active use. Primary improvements for water conservation are proposed to occur at the front and interior of the site.</p> <p>Current landscape at the front of the school includes 2.3 acres of turf that is primarily for the purpose of aesthetics. There are also interior courtyards with underutilized turf panels that total a little over one-third of an acre. Planned improvements for these areas include replacing the turf with drought tolerant plants, pollinator gardens, benches, bio swales and decomposed granite paths. Interpretive panels would be installed to inform students and visitors of the benefits of the water conservation improvements and the relative ecosystems for each environment.</p> <p>Interior improvements would also include capturing roof water from downspouts and directing the water to bio swales where it would be filtered before entering the storm drain system or simply percolate into the soil. Interior courtyard landscapes would also be laid out to accommodate a setting for outdoor classrooms.</p>

# Projects within Yolo County Removed From Consideration

Project No.	Lead Agency Organization	Project Title	Project Description Briefly describe the project in 300 words or less
26	Solano County Water Agency	Improvements to Solano Project Facilities	The Solano Project was constructed by the US Bureau of Reclamation in the 1950s and is comprised of Monticello Dam, Putah Diversion Dam, Putah South Canal, and Terminal Reservoir. Today, the project provides irrigation and municipal water to over 400,000 people in Solano County. However, the Solano Project is 60 years old and is in need of upgrades, repairs, and modernization.
30	Solano County Water Agency	North Bay Aqueduct Alternate Intake Project	The California Department of Water Resources proposes to implement the North Bay Aqueduct (NBA) Alternate Intake Project (NBA AIP) to improve water quality and reliability of State Water Project deliveries to its NBA contractors, the Solano County Water Agency and the Napa County Flood Control and Water Conservation District. The NBA AIP includes the construction and operation of a new intake and pumping plant on the Sacramento River, conveyance pipeline, and inline storage to divert and convey water from the Sacramento River connecting to the existing NBA pipeline near the North Bay Regional Water Treatment Plant in Fairfield.
80	Tuleyome	Cache Creek Anadromous Fish Reintroduction	Prior to the construction of the Cache Creek Settling Basin anadromous fish were found in Cache Creek. Long time Yolo County resident Joe Farnham talked of his dad catching salmon with pitchforks to feed to the hogs. These salmon runs were most likely opportunistic fall run occurring when early storms provided connectivity from Cache Creek through the original wetlands of the delta and later the Yolo Bypass. There are also reports by a CA DFG warden of steelhead in Clear Lake. This four phase project will study the opportunity and constraints for the reintroduction to Cache Creek; design necessary channel improvements including fish passage at the Settling Basin; environmental work and permitting; and construction of the planned facilities necessary for fish reintroduction; and appropriate monitoring to assess results Some of this work was completed in the Natural Heritage Institute Review Draft Report Enhancing Natural Values in Cache Creek Within a Water Supply Augmentation Program submitted to the Yolo County Flood Control and Water Conservation District on April 1, 2003. Studies must look at physical constraints such as temperature, flow regimes and spawning opportunities, climate change impacts, institutional issues including safe harbor for the YFCWCD, and stakeholder outreach. Based on the outcome of those studies fish passage designs will be completed follow by environmental and permitting work. Lastly, construction can be undertaken.
93	Rural Community Assistance Corporation	Rural Disadvantaged Community (DAC)	RCAC will manage the Prop 84 grant funds to address inadequate water supply and water quality in rural disadvantaged communities (DACs) in the Westside Sacramento IRWM region, including tribal communities, with populations less than 10,000. DACs will be selected based on already recognized income data or completion of an income survey. RCAC will perform a needs assessment of disadvantaged communities using DWR and Westside Sacramento's DAC mapping tools. The assessment will include asking for information on _____. RCAC will lead a representative group of stakeholders and agencies to solicit and select rural DACs for funding of critical infrastructure improvement projects. Rural DACs and affiliated regulatory agencies will be contacted for eligible projects with a focus on DACs in non-compliance with local, state, and federal agencies. Criteria for selection will be based on the following factors: 1) public health risks, 2) environmental justice, 3) multiple benefits, 4) affordability and sustainability, 5) incorporation of green technologies. Opportunities to merge related projects will be evaluated. Projects will be selected from both tribal and non-tribal rural DACs. Preference will be given to DAC projects that are ready to be constructed. In every case, RCAC will look for other available funding resources to leverage Prop 84 dollars. RCAC is a certified Community Development Financial Institution (CDFI) and will be responsible for disbursements for selected DAC projects. RCAC will provide DACs with outreach, program information, assisting with project scope and readiness, project documentation for funding, assistance with engineering and contractor selection, project oversight, and disbursement of individual DAC project payments. To extend Prop 84 dollars, RCAC will provide supplementary capacity development, training, and technical assistance to support project sustainability utilizing RCAC programs.
95	Reclamation District 2035	Sacramento River Joint Intake Project	The proposed joint intake and diversion is to be located at approximately River Mile (RM) 70.8 on the right bank of the Sacramento River near Woodland, California. The facility will be used jointly by RD 2035 and the Woodland Davis Clean Water Agency (WDCWA) to divert water from the Sacramento River. RD 2035 has pursued construction of a new diversion since approximately 1998 to comply with the Federal Endangered Species Act, which lists winter-run Chinook salmon as endangered. RD 2035 completed preliminary design drawings and a Basis of Design Report (BODR) (RD 2035 Fish Screen Project, September 2010) in 2010 for a new intake facility that would meet all current fish screening and floodway protection requirements. WDCWA, a joint powers authority of the Cities of Woodland and Davis, was created in 2009 to undertake and implement a project to divert water from the Sacramento River, transmit the water for treatment to a new water treatment facility, and deliver treated surface water to the Cities of Davis and Woodland and the University of California, Davis for use in their respective service areas. WDCWA and RD 2035 have entered into an agreement that would allow joint use of the new RD 2035 intake facility to supply water to the planned WDCWA water treatment facility. RD 2035 and WDCWA completed preliminary design drawings and a Basis of Design Report (BODR, Sacramento River Joint Intake Project, October 2011). This 2011 BODR provides the basis of the Project cost estimate, schedule and statement of work presented herein. The Project consists of a 400-cfs intake and integrally constructed pump station, new discharge pipeline and appurtenant structures, and demolition of the existing facilities. The intake will be a concrete structure, founded on steel piles, with ten stainless steel fish screen panels. Screens will be cleaned with an automated traveling brush screen cleaning system, and a submersible pump and piping system will be provided to manage sediment in the intake. The pump station building will house the RD2035 and Agency pumps, and associated electrical equipment and controls. Discharge pipelines and appurtenant structures will be located outside of the pump station building and the piping will cross under County Road 117. RD2035's pipe will discharge to a new outlet structure to the main canal. Once the new intake is constructed, the existing RD2035 intake will be demolished and the conduit through the levee excavated, demolished, and removed.
119	Yolo County Flood Control and Water Conservation District	Moore Siphon Reliability/Restoration Project	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, YFCWCD 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.
131	Yolo Basin Foundation	Pacific Flyway Center/Delta Gateway	The Pacific Flyway Center (Center) is a proposed educational facility and site intended to serve the general public, Central Valley area school districts, various public sector agencies and special environmentally focused events and activities. The ultimate facility and site is anticipated to include wetland habitats, trail linkages and a 12,000 square foot building, which will present educational programs based on regional ecosystems, the functions of the Yolo Bypass, and showcase an array of ERP and BDCP programs. The building would contain exhibition spaces, meeting rooms, offices, outside observation areas, multi-purpose educational facilities and parking. The Center, to be owned and operated by the CA Department of Fish and Game, will be a public engagement site situated at the hub of a larger public resource consisting of the Yolo Bypass Wildlife Area (Wildlife Area), the Yolo Bypass, the Sacramento/San Joaquin Delta (Delta) and the Pacific Flyway.
133	Yolo Basin Foundation	Yolo Bypass Wildlife Area Public Use Imp	The Yolo Bypass Wildlife Area Land Management Plan (LMP) has an "authorized" public use element that outlines tasks associated with improving wildlife viewing, fish and hunting. This proposal would complete some of the tasks related to enhancement of public use infrastructure. To maintain and improve wildlife observation (LMP, 5-34) <ul style="list-style-type: none"> <li>• Expand existing northern auto tour route to encompass portions of the Causeway Ranch and adjacent units.</li> <li>• Develop a new southern auto tour route on the Tule Ranch</li> <li>• Develop and install interpretive signage for wildlife viewing roads and trails</li> <li>• Develop viewing blinds, observation towers, and board walks where appropriate</li> </ul> To maintain and improve angling (LMP, 5-35): <ul style="list-style-type: none"> <li>• Develop maps and signs that indicate fishing access points and post regulations</li> <li>• Build access points for anglers with limited mobility along East Toe Drain</li> <li>• Identify and name six trails in the existing auto tour loop</li> <li>• Install signs that identify the name and mileage at the end of each trail.</li> <li>• Provide a map and interpretive information at each trailhead.</li> </ul> To maintain and improve hunting (LMP, 5-35): <ul style="list-style-type: none"> <li>• Construct new hunter check station, potentially at the Tule Ranch Headquarters. This new entry point would separate wildlife viewing areas from hunting areas in a north-south direction rather than the current east-west situation.</li> </ul> Other access improvements could include: <ul style="list-style-type: none"> <li>• Improve the entry signage to the Yolo Bypass Wildlife Area at I-80.</li> <li>• Improve the existing Parking Lot A kiosk.</li> <li>• Install additional directional signage throughout the entire auto tour loop and hunting areas.</li> </ul>
134	RWMG with selected Lead Agency	Climate Change Adaptation Study	Regional study to advance understanding of the effects of climate change and consider potential modifications to the water management system.



# Projects within Yolo County Removed From Consideration

Project No.	Lead Agency Organization	Project Title	Project Description Briefly describe the project in 300 words or less
137	Reclamation District 2035	Installation of Groundwater Wells	Engineer, design and install groundwater wells.
138	Reclamation District 2035	Groundwater Studies	Reclamation District 2035's Ground Studies Project will consist of the identification and analysis of issues, if any, surrounding the quality and availability of groundwater.
145	City of West Sacramento	Municipal Well at the George Kristoff Wa	Project includes environmental, design and construction of a new municipal well located at 400 N.Harbor Blvd in the City of West Sacramento. This well will augment City potable water supplies during drought conditions. This well in not intended to increase water production but allow upstream surface water diversions by as much as 4,500 acre feet annually.
149	City of Woodland	Woodland Industrial Recycled Water Pro	<p>The City of Woodland currently has tertiary treated Title 22 effluent from the City's Water Pollution Control Facility (WPCF) providing a firm capacity of approximately 2,700 gpm for recycled water. The City of Woodland relies exclusively on groundwater for its water supply. When surface water is available, recycled water would improve reliability and reduce demands on both groundwater and surface water sources. Woodland has a large industrial area northwest of the Water Pollution Control Facility (WPCF). There are several large water users that would use the recycled water for cooling of various industrial processes. In addition, there are two City Parks along the recycled water pipeline alignment that would use the water for irrigation. Providing recycled water to these areas would reduce demands on the potable water distribution system and reduce the demand on the groundwater aquifer. The recycled water pipeline would be constructed in the City's existing right of way. The City has recently completed a Mitigated Negative Declaration for pipeline installation, repair, and rehabilitation throughout the City. The expected initial demand for recycled water would exceed 2,000 acre feet per year. The Capital Cost for the Project is approximately \$5.2M.</p> <p>The recycled water project includes construction of approximately 20,000 feet of 12" diameter purple pipe and a pump station at the WPCF. As users increase, a storage tank will need to be added to balance demand with supply. Woodland is also evaluating extending the recycled water pipeline to serve adjacent agricultural fields as a future project.</p>
158	Lake County Watershed Protection District	Quagga Boat Display	<p>An integral part of the program is to educate the public on the harm invasive mussels can do to aquatic ecosystems and how to prevent their spread. Using State and locally developed educational materials, this has been effective. We have purchased visual aids showing pipes at various stages of infestation with quagga mussels, which are very effective in communicating the issue. Another tool envisioned several years ago was to have a boat infested with quagga mussels available for display. A boat was transported to Lake Mead and is now thoroughly infested with quagga mussels. With the requirements of various regulatory agencies, the cost of returning the quagga boat to Lake County has exceeded original expectations. Lake County has requested grant funding for returning the quagga boat from the State and the Federal governments, however, we have been unsuccessful.</p> <p>Lake County is requesting the Westside IRWM assist with funding for the return of the boat. We believe the quagga boat display will bring the shock factor to the northern California general public. The quagga boat shall be used on a regional basis to bring awareness about invasive mussels to the residents and visitors to the region by visual example. The boat will be available to the Westside IRWM members for display, and will be displayed at events such as boat shows, County fairs, the State Fair, major fishing tournaments, etc.</p> <p>Basic requirements for movement of the quagga boat include having permits from the appropriate agencies (California Department of Fish and Wildlife and Nevada Department of Wildlife have provided the permits), sealing the mussels to the boat so mussels do not fall off, and transporting the boat in a fully enclosed trailer. The boat will be removed from Lake Mead turned upside-down with a crane onto a trailer, and allowed to dry thoroughly. The boat will be fixed to the trailer permanently. The dried, dead mussels shall be sprayed with a lacquer of sufficient thickness that no pieces of dead mussel can detach from the boat's hull. The trailer will be pulled by winch, tongue first, into an aluminum, enclosed, car trailer. The car trailer shall be transported with the appropriate permitting documentation from Nevada to Lake County, California. We are also proposing purchasing a display tent and other items to keep with the boat for facilitating display.</p>
159	City of Winters, CA	City of Winters Drinking Water Hexavale	The City is under Notice of Violation with the SWRCB Division of Drinking Water to reduce Cr6 levels in four of its five wells (82% of the City's water supply) exceeding the new Cr6 Primary MCL. This is a new drinking water quality regulation approved by the State in July 2014 with enforcement beginning in August 2015 for urban water suppliers with sources in exceedance of the new Cr6 regulations. The City is requesting funds to design a cost-effective Cr6 compliance strategy for the community that meets the new Cr6 regulations within the State's compliance schedule.
161	City of Davis	Leak Detection Survey	Hire a consultant to use acoustical listening technology to survey water mains and laterals within the City of Davis water distribution area to detect and locate leaks. Prioritize leaks based on severity. Purchase leak detection equipment to install within distribution system to continuously monitor for potential leaks at key areas identified through the leak detection survey.

## Yolo SWRP – Potential Projects Survey

The results of this form will aid in the development of the project prioritization and scoring criteria. Please complete this form by April 17, 2017.

\* Required

1. Contact Name \*

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2. Contact Email \*

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3. Project Proponent(s)/Partner(s) \*

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4. Project Name \*

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5. Project Location/Service Area \*

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**6. Current Project Phase - Check all that apply \***

*Check all that apply.*

- Conceptual
- Planning
- Design
- Construction
- Other: \_\_\_\_\_

**7. Has this project been submitted to the Westside IRWM Plan? \***

*Mark only one oval.*

- Yes
- No

**8. Anticipated Benefits \***

*Check all that apply.*

- Water Quality (e.g. increased infiltration and/or treatment of runoff; nonpoint source pollution control; reestablish natural water drainage and treatment)
- Water Supply (e.g. water supply reliability; water conservation; conjunctive use)
- Flood Management (e.g. decreased flood risk by reducing runoff rate and/or volume; reduced sanitary sewer overflows)
- Environmental (e.g. environmental/habitat protection/improvement; wetland enhancement/recreation; riparian enhancement; instream flow improvement; increased urban greenspace; reduced energy use, GHG emissions, or provides a carbon sink; reestablish natural hydrograph; water temperature improvements)
- Community (e.g. enhanced and/or created recreational/public use areas; community involvement; employment opportunities)
- Other: \_\_\_\_\_

**9. Planned Objectives Met (From Guidelines Page 9) - Check all that apply**

*Check all that apply.*

- Creates and restores wetlands (Wat. Code, § 10561(g))
- Riverside [riparian] habitats (Wat. Code, § 10561(g))
- Instream flows (Wat. Code, § 10561(g))
- Increase in park and recreation lands (Wat. Code, § 10561(g))
- Urban green space (Wat. Code, § 10561(g))
- Augments recreation opportunities for communities (Wat. Code, § 10561(h))
- Increases tree canopy (Wat. Code, § 10561(h))
- Reduces heat island effect (Wat. Code, § 10561(h))
- Improves air quality (Wat. Code, § 10561(h))
- Maximizes water quality (Wat. Code, § 10562(b)(2))
- Maximizes water supply (Wat. Code, § 10562(b)(2))
- Maximizes flood management (Wat. Code, § 10562(b)(2))
- Maximizes environmental benefits (Wat. Code, § 10562(b)(2))
- Maximizes other community benefits (Wat. Code, § 10562(b)(2))

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