

**Cosumnes Working Group
For Working Group Discussion at the November 17, 2021 meeting**

NOVEMBER 15, 2021

RE: Proposed additional projects/management actions for the Cosumnes Subbasin Working Group to consider including in the Cosumnes Subbasin Groundwater Sustainability Plan

This document compiles recently shared proposed projects/management actions (P/MAs) for the Working Group to consider including in the final Cosumnes GSP.

These are draft items are subject to change and for discussion purposes only.

- **Two P/MAs from Galt Irrigation District:**
 - Archoe Public Facility Well
 - Herald-Galt Recharge Projects
- **One P/MA from Clay Water District:**
 - Clay Recharge Projects
- **One P/MA from Amador County GSA:**
 - Amador County Surface Water Recharge

**COSUMNES SUBBASIN
PROJECT / MANAGEMENT ACTION
INFORMATION FORM**

P/MA ID:	BASIN/MANAGEMENT AREA (if any): Cosumnes Sub-basin / GID
TITLE: Archoe Public Facility Well	
DESCRIPTION¹: Apply for a new facility well for Arcohe School. Develop a groundwater recharge program for the campus and couple that with their educational garden utilizing Best Management Practices (BMP's) for Irrigation Water Management, Nutrient Management, and Integrated Pest Management. Educational component on water savings gardening is a community wide benefit that can provide water savings outreach back to homeowners.	
EXPECTED ANNUAL BENEFIT (demand reduction or supply augmentation, in acre-feet per year): A/F unknown at this time but known water quality, conservation & educational benefit	
AGENCY(s): Primary/Lead: <u>Galt Irrigation District / Archoe Unified School District</u> Supporting: <u>Sacramento County, USDA, DWR, RWQCB</u>	
LOCATION: <input type="checkbox"/> Check here if Basin-wide Township / Range: <u>Southwest Quarter of Section 8, T 5 N, R 7 E Clay Quad</u> Coordinates (Latitude / Longitude): <u>038° 17' 43.550" N 121° 14' 25.046" W NAD 27</u> Description: <u>Arcohe School grounds</u>	
AFFECTED SUSTAINABILITY INDICATOR (check all that apply): <input checked="" type="checkbox"/> Chronic Lowering of Groundwater Levels <input checked="" type="checkbox"/> Reduction of Groundwater Storage <input type="checkbox"/> Seawater Intrusion <input checked="" type="checkbox"/> Degraded Water Quality <input type="checkbox"/> Land Subsidence <input type="checkbox"/> Depletions of Interconnected Surface Water	
TYPE (check all that apply): <input type="checkbox"/> Water Supply Augmentation <input type="checkbox"/> Surface Water <input checked="" type="checkbox"/> Groundwater (Recharge) <input type="checkbox"/> Recycled Water <input type="checkbox"/> Transfer <input checked="" type="checkbox"/> Stormwater <input type="checkbox"/> Other Source of Outside Water (if applicable): _____ <input type="checkbox"/> Water Demand Reduction <input checked="" type="checkbox"/> Conservation <input checked="" type="checkbox"/> Land / Water Use Changes <input checked="" type="checkbox"/> Infrastructure / Capital Project <input type="checkbox"/> Policy Project <input type="checkbox"/> Data Gap Filling / Monitoring <input checked="" type="checkbox"/> Water Quality Improvement <input type="checkbox"/> Other: _____	

¹ Please continue to next page or attach additional pages to this form as necessary

COSTS & FUNDING SOURCE(s):

Capital / Up-front (\$): Unknown at this time
Source(s): Grant funds, Cost Share funds, district funds, school district funds
O&M / On-going (\$ per year): Unknown at this time
Source(s): School district will need to maintain once completed

REGULATORY / LEGAL AUTHORITY REQUIREMENTS (describe all that apply):

Permits (name of authority, type of permit): Sacramento County, unidentified as of current
CEQA: New well requirements
Other: Possible State/Federal permitting

SCHEDULE / TIMING:

Implementation Trigger(s): As soon as possible

Termination Trigger(s): None

Timeframe to Accrue Expected Benefits: Immediately

ADDITIONAL DETAILS (as necessary):

Due to changes in the drinking water policy, current well test results indicate higher than allowed arsenic levels for human consumption. The current system requires water being flushed continuously to keep these levels from building up. This practice does not allow for responsible conservation of groundwater. Arcohe Unified School District is within an underserved/disadvantaged community, serving Pre-K through 8th grade students. A facility well is the only source of potable water for the school district. The old well could be used for irrigating the school garden or abandoned all together depending on new well placement.

**COSUMNES SUBBASIN
PROJECT / MANAGEMENT ACTION
INFORMATION FORM**

P/MA ID:	BASIN/MANAGEMENT AREA (if any): Cosumnes Sub-basin / GID																								
TITLE: Herald-Galt Recharge Projects																									
DESCRIPTION¹: Excavate and deepen catch ponds throughout the basin to capture winter storm water. Install some sort of Dry wells, seepage pits and/or water subbing practices to disturb the clay layer in the soil profile whereby assisting with ground water recharge. Targeted projects will be installed within or along identified water storage/ponds and just outside of drainage-ways throughout the Sub-basin, especially within the Cone of Depression. There is potential for multiple locations within the boundaries of Galt Irrigation District. Work with City of Galt on management of their flood ponds that receive water flow from waterways within the District and accumulates in Deadmans Gulch.																									
EXPECTED ANNUAL BENEFIT (demand reduction or supply augmentation, in acre-feet per year): Unknown at this time, however each location could potentially add 50 to 1,000+ acre-feet/year/location, depending on site & practices.																									
AGENCY(s): Primary/Lead: <u>Galt Irrigation District, City of Galt, CDFW, RWQCB, DWR (will depend on the actual project)</u> Supporting: _____																									
LOCATION: <input type="checkbox"/> Check here if Basin-wide Township / Range: _____ Coordinates (Latitude / Longitude): _____ Description: <u>Within Galt Irrigation District boundaries and City of Galt property west of Hwy 99</u>																									
AFFECTED SUSTAINABILITY INDICATOR (check all that apply): <table style="width: 100%; border: none;"> <tr> <td><input checked="" type="checkbox"/> Chronic Lowering of Groundwater Levels</td> <td><input checked="" type="checkbox"/> Reduction of Groundwater Storage</td> </tr> <tr> <td><input type="checkbox"/> Seawater Intrusion</td> <td><input checked="" type="checkbox"/> Degraded Water Quality</td> </tr> <tr> <td><input type="checkbox"/> Land Subsidence</td> <td><input type="checkbox"/> Depletions of Interconnected Surface Water</td> </tr> </table>		<input checked="" type="checkbox"/> Chronic Lowering of Groundwater Levels	<input checked="" type="checkbox"/> Reduction of Groundwater Storage	<input type="checkbox"/> Seawater Intrusion	<input checked="" type="checkbox"/> Degraded Water Quality	<input type="checkbox"/> Land Subsidence	<input type="checkbox"/> Depletions of Interconnected Surface Water																		
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¹ Please continue to next page or attach additional pages to this form as necessary

COSTS & FUNDING SOURCE(s):

Capital / Up-front (\$): est of \$10,000-\$15,000 per site

Source(s): Grants & cost share monies

O&M / On-going (\$ per year): Unknown at this time

Source(s): Grants & cost share monies

REGULATORY / LEGAL AUTHORITY REQUIREMENTS (describe all that apply):

Permits (name of authority, type of permit): Sacramento County, CDFW, RWQCB, DWR, Environmental health

CEQA: Unknown at this time

Other: _____

SCHEDULE / TIMING:

Implementation Trigger(s): As soon as funds and/or permits are available

Termination Trigger(s): None

Timeframe to Accrue Expected Benefits: Within 24 months or so depending on the winter storm water

ADDITIONAL DETAILS (as necessary):

As the counties and states allow more building of houses and infrastructure to support the growing population, more land that was at one time permeable (allowing winter storm waters to slowly percolate through the soil profile whereby recharging the ground water) is now being restricted by roof tops, concrete, and asphalt. Winter storm water now sheet flows across the non-permeable surfaces into storm drains and drainage ways, This is not conducive to subbing back through the soil profile. We need to enhance the subbing of our surface waters back into the ground.

**COSUMNES SUBBASIN
PROJECT / MANAGEMENT ACTION
INFORMATION FORM**

P/MA ID:	BASIN/MANAGEMENT AREA (if any): Cosumnes Sub-basin / CID
TITLE: Clay Recharge Projects	
DESCRIPTION¹: Enhance catch ponds throughout the basin to capture winter storm water. Install some sort of dry wells, seepage pits and/or water subbing practices to disturb the clay layer within the soil profile whereby assisting with ground water recharge through the clay layer. Practices will be installed within or along identified water storage ponds and possibly just outside of drainage-ways where water stands during the winter months. During heavy rain events, rain water from surrounding creeks such as Browns Creek, Hadsville Creek, Griffith Creek as well as multiple unnamed tributary drainages all flow into Laguna Creek. During these heavy flow months water can be diverted into some of the surrounding pasture lands where it can be held for recharging the aquifer. Excess winter water can also be siphoned from Folsom South into surrounding fields for ground water recharge if excess water is available.	
EXPECTED ANNUAL BENEFIT (demand reduction or supply augmentation, in acre-feet per year): Unknown at this time, however each location could potentially add 50 to 1,000+ acre-feet/year/location, depending on site & practices.	
AGENCY(s): Primary/Lead: <u>Clay Irrigation District, CDFW, RWQCB, DWR, ACOE, will depend on the actual project</u> Supporting: <u>Will depend on the actual project & site</u>	
LOCATION: <input type="checkbox"/> Check here if Basin-wide Township / Range: <u>several sections within the Clay Quad T 5 & 6 N R 7 & 8 E</u> Coordinates (Latitude / Longitude): _____ Description: <u>Clay Irrigation District Wide</u>	
AFFECTED SUSTAINABILITY INDICATOR (check all that apply): <input checked="" type="checkbox"/> Chronic Lowering of Groundwater Levels <input checked="" type="checkbox"/> Reduction of Groundwater Storage <input type="checkbox"/> Seawater Intrusion <input checked="" type="checkbox"/> Degraded Water Quality <input type="checkbox"/> Land Subsidence <input type="checkbox"/> Depletions of Interconnected Surface Water	
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COSTS & FUNDING SOURCE(s):

Capital / Up-front (\$) : estimate of \$10,000-\$25,000 per site, but really not sure yet? could be way more if special drywells are needed. working on that.

Source(s) : Grants & cost share money

O&M / On-going (\$ per year) : not sure yet

Source(s) : Grants & cost share money

REGULATORY / LEGAL AUTHORITY REQUIREMENTS (describe all that apply):

Permits (name of authority, type of permit) : Sacramento County, CDFW, RWQCB, DWR, ACOE, Environmental health

CEQA : possibly will depend on project

Other : _____

SCHEDULE / TIMING:

Implementation Trigger(s) : as soon as funds and/or permits are available to do anything

Termination Trigger(s) : _____

Timeframe to Accrue Expected Benefits : within 12 months or so depending on the winter storm water or other waters if available

ADDITIONAL DETAILS (as necessary):

Rain water can be diverted onto surrounding pasture lands from laguna creek during winter months where it can slowly peculate through the soil profile and recharge the ground water. Excess water from Folsom South or SMUD can be dumped into Laguna Creek. Laguna Creek flows from Clay Irrigation District to Galt Irrigation District where the cone of depression exists within this sunbasin. Laguna Creek appears to have a sandy bottom in most places to allow for ground water recharge. We need to enhance the subbing of our surface waters back into the ground.

**COSUMNES SUBBASIN
PROJECT / MANAGEMENT ACTION
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P/MA ID:	BASIN/MANAGEMENT AREA (if any): Amador GSA / Cosumnes Basin
TITLE: Amador County Surface Water Recharge	
DESCRIPTION¹: To investigate the feasibility of utilizing potentially available surface water from Amador County through existing conveyance systems into areas within the Cosumnes Basin. This PMA could be both a recharge and/or replace pumped water. There needs to be further investigation of the possibility of either a sale or transfer of water which will require many discussion and the development of new agreements with other stakeholders.	
EXPECTED ANNUAL BENEFIT (demand reduction or supply augmentation, in acre-feet per year): Possibly up to 5,000 acre feet depending on available water.	
AGENCY(s): Primary/Lead: <u>Amador County Groundwater Management Authority (ACGMA)</u> Supporting: <u>Amador County GSA and the Cosumnes SGMA Basin</u>	
LOCATION: <input type="checkbox"/> Check here if Basin-wide Township / Range: _____ Coordinates (Latitude / Longitude): _____ Description: _____	
AFFECTED SUSTAINABILITY INDICATOR (check all that apply): <input checked="" type="checkbox"/> Chronic Lowering of Groundwater Levels <input checked="" type="checkbox"/> Reduction of Groundwater Storage <input type="checkbox"/> Seawater Intrusion <input checked="" type="checkbox"/> Degraded Water Quality <input type="checkbox"/> Land Subsidence <input type="checkbox"/> Depletions of Interconnected Surface Water	
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COSTS & FUNDING SOURCE(s):

Capital / Up-front (\$): Unknown at this time

Source(s): Unknown

O&M / On-going (\$ per year): Unknown at this time

Source(s): Unknown

REGULATORY / LEGAL AUTHORITY REQUIREMENTS (describe all that apply):

Permits (name of authority, type of permit): Unknown at this time

CEQA: Possible

Other: _____

SCHEDULE / TIMING:

Implementation Trigger(s): Start in 2022

Termination Trigger(s): _____

Timeframe to Accrue Expected Benefits: Could be up to two years before knowing if beneficial

ADDITIONAL DETAILS (as necessary):