DWR Implementation Grant: Components

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Grant Structure

- Components
  - Tasks and deliverables
  - Categories
    - Grant Agreement Administration
    - Environmental / Engineering / Design
    - Implementation / Construction
    - Monitoring / Assessment
    - Engagement / Outreach
- Planning, construction, or both
- No limit on number of components
  - DWR wants simple, easily reviewable
- Score= Average of all components
  - May cut least prioritized components to meet State budget requirements

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TABLE 7 – APPLICATION EVALUATION CRITERIA

Section Name	Q#	Questions	Possible Points	Scoring Guidance
General	1	Was a description of the proposed Project or Component provided? Did it explain why this Project or Component was chosen over all others identified in the Plan in terms of benefits provided, communities served, measurable objectives, minimum thresholds, plan implementation timeline, and feasibility? If you feel a question component does not apply to your proposed project, please explain why it is not applicable. (Example "Measurable objective not applicable because project is planning only".) • *No funds will be awarded without clear justification for the proposed tasks/subtasks.*	4	• 4 – Fully addressed • 3 – Mostly addressed, with minor details not included or unclear • 2 – Mostly addressed, with significant details missing or unclear • 1 – Marginally addressed • 0 – Not addressed
General Implementation Only	2-Imp	Does the Project or Component provide a description of quantifiable benefits? Was an explanation of the benefits that are expected to be realized from the Project or Component provided, along with how those benefits will be evaluated and quantified? • *To obtain full points, 3 or more quantifiable benefits must be identified and fully supported with backup documentation.*	4	• 4- At least three quantifiable benefits with explanations and supporting documents. • 3 – Two quantifiable benefits with explanations and supporting documents. • 2 - Two quantifiable benefits lacking explanations and supporting documents. • 1 - One quantifiable benefit with explanations and supporting documents. 0 – Benefits provided but are not explained or quantified.
General Planning Only	2-Plan	Does the Project Description describe a well-coordinated proposal including a GSP(s) that encompasses the entire basin or describes why a portion of the basin is not covered in the proposal? Does it describe how well the multiple GSA(s) surrounding and within the basin are working together?	4	• 4 – Fully addressed • 3 – Mostly addressed, with minor details not included or unclear • 2 – Mostly addressed, with significant details missing or unclear • 1 – Marginally addressed • 0 – Not addressed
General	3	Does the Project or Component fully describe their plan for outreaching and engaging interested parties (e.g., residents, local leaders, non-profit representing Underrepresented Communities, etc.) located within Underrepresented Communities? Does the outreach and engagement include interested parties during all phases of the Project or Component (e.g., planning, design, and implementation)? Can interested parties provide input and be involved in the decision-making processes? • *To obtain full points, a minimum of three comment letters are required from the Underrepresented Communities.*	3	• 3 – Interested parties included on decision-making committees and fully engaged/involved in all aspects of the Project or Component • 2 – Interested parties engaged/involved, but not included on decision-making committees • 1 – Marginally addressed • 0 – Not addressed
General	4	Was there a regional and Project map(s) depicting the site location, current conditions, and benefitting areas? • *The information should be clear and easy to read. If not, the point will not be given.*	2	• 2 – Provided and all necessary information provided • 1 – Provided but missing some information • 0 – Not provided

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General	5	Does the project benefit an Underrepresented Community (-ies)? Was there a map(s) depicting the Underrepresented Community (-ies) that the project will benefit? Does the project benefit an SDAC? Was there a map(s) depicting the SDAC(s) that the project will benefit? Please provide the amount of funding that will benefit both the Underrepresented Community and SDAC. • *No points will be given if a map(s) is not provided.*	3	• 3- Project benefits an SDAC(s) • 2- Project benefits Underrepresented Community • 1 – Project partially benefits either • 0 – Project does not benefit either
General	6	Will the Project or Component positively impact issues associated with small water systems or private shallow domestic wells (e.g., groundwater contamination vulnerability, drawdown, etc.)? Was justification such as domestic well census results, water system maps, service area maps, etc. provided? Does the Project or Component help address the needs of the State Water Board's SAFER Program?	3	• 3 – Fully addressed • 2 – Mostly addressed, with minor details not included or unclear • 1 – Marginally addressed • 0 – Not addressed
General	7	How does the proposed Project or Component address the Human Right to Water (AB 685 Section 106.3)? How will the Project or Component support the established policy of the State that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes?	4	• 4 – Fully addressed • 3 – Mostly addressed, with minor details not included or unclear • 2 – Mostly addressed, with significant details missing or unclear • 1 – Marginally addressed • 0 – Not addressed
Scope of Work	8	Did the proposal provide a description of the tasks/subtasks that will be completed as part of this grant Project? • *No funds will be awarded without clear justification for the proposed tasks/subtasks.*	3	• 3 – Fully addressed • 2 – Mostly addressed • 1 – Marginally addressed • 0 – Not addressed
Budget	9	Is a budget summary table provided? Is the budget reasonable for the project? Is the budget table tasks/subtasks provided in the scope of work coincide with the tasks/subtasks in the budget and schedule tables? Is local cost share included (minimum of 5%)? Local cost share may include costs expended on projects before grant agreement date. • *Local cost share is not required but necessary to obtain full points.*	3	• 3 – Local cost share is provided, and budget is consistent and feasible • 2 – Budget is consistent and feasible • 1 – Budget is consistent but not feasible • 0 – Not consistent and feasible
Schedule	10	Is the tasks/subtask in the schedule table consistent with those listed in the budget table and within the description in the application? Is the schedule feasible?	1	• 1 – Consistent and feasible • 0 – Not consistent and feasible
		Total Range of Possible Points	0-30	
		(a) Average of Questions 1 – 8 for Multiple Component Applications		
		(b) Total Score for Questions 9 and 10		
		Total Points Overall Project:		
		TOTAL FUNDING RECOMMENDED:		**$**

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As Committee members…

- Do the components capture the correct details and direction provided by CGA?
  - Does the component align with CGA's approach to sustainability?
  - Does the component(s) adequately capture the range benefits needed for the subbasin?
  - Is the component feasible and will it work for CGA, GSAs, and stakeholders/constituents?
- Are we missing anything??
- Begin thinking about priority ranking of each component in the grant

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Table 2 – Ranking of Proposed Components

Rank	Name	SJV Funds Component Requirement	Readiness	Partnerships with Non-Profits, Non-Governmental Organizations (NROs), and/or Colleges/Universities	Benefactors	Cost
Rank in order of importance with 1 being most important. Do not use rank # more than once each.	*Provide a name for each proposed component.*	*Please check box if the component is eligible for SJV-funds*	*Please check if the component will be under constructio n by the end of 2023*	*Please list all partnering agencies that are collaborating on a component with the estimate amount of funding being provided to the nonprofit(s), NGO(s), and/or college(s)/ university (-ies)*	*Does this component benefit any of the following communities ? (Check all that apply)*	*Provide a cost estimate for the total component cost. Round to nearest hundred.*
1	Component Name	☐	☐		☐ Tribe(s) ☐ URC(s) ☐ SDAC(s)	$
2	Component Name	☐	☐		☐ Tribe(s) ☐ URC(s) ☐ SDAC(s)	$
3	Component Name	☐	☐		☐ Tribe(s) ☐ URC(s) ☐ SDAC(s)	$
4	Component Name	☐	☐		☐ Tribe(s) ☐ URC(s) ☐ SDAC(s)	$
5	Component Name	☐	☐		☐ Tribe(s) ☐ URC(s) ☐ SDAC(s)	$
6	Component Name	☐	☐		☐ Tribe(s) ☐ URC(s) ☐ SDAC(s)	$
7	Component Name	☐	☐		☐ Tribe(s) ☐ URC(s) ☐ SDAC(s)	$
8	Component Name	☐	☐		☐ Tribe(s) ☐ URC(s) ☐ SDAC(s)	$
					Total Cost:	$

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Component: Recharge Well Design and Deployment (Laguna Del Sol)

- General:
  - Design and install dry-well recharge wells (working with USDA SAWS)
    - Expand existing project plus additional site selection
    - inform other recharge areas (FSC Service Area, on-farm, Laguna Creek, Dry Creek, etc…)
  - Calibrate non-invasive geophysical characterization with sonic-core drilling
  - Water quality monitoring
  - Test infiltration capacity of dry-wells
- Goals:
  - Quantify expected infiltration capacity
  - Prepare for surface water supply
  - Inform budget of Phase 2 supply augmentation

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Component: Recharge Well Design and Deployment (Laguna Del Sol)

- Quantifiable Benefits:

- Stabilized water levels due to augmented recharge. Water levels will be monitored at Representative Monitoring Sites (RMS) wells and monitoring infrastructure constructed at the project site specifically to measure local benefits from the project
- Demonstrate project effectiveness and provide BMPs to guide expansion of new projects into other parts of the basin
- Data collected to determine site suitability and characterize subsurface conditions will guide identification and prioritization of additional recharge projects, and will be used to refine the Hydrogeologic Conceptual Model (HCM) for the basin
- *working with DWR and grant writer to determine best way

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MANAGED AND NATURAL AQUIFER RECHARGE (1 OF 3)

LOCAL DIVERSION PROJECTS

- Outreach to landowners along Dry Creek & Laguna Creek to identify lands with existing diversion infrastructure & willingness to participate.
- Locate Project sites focused along Dry Creek and Laguna Creek.
- Rank potential sites based on location & surface/subsurface hydrogeologic conditions.
- CGA select up to 4 sites to secure access for confirmation studies & project development
  - Confirm site suitability (geophysics/infiltration tests/source water and groundwater quality)
  - Plan & design diversion and/or recharge infrastructure for 1-2 sites
  - Approve plans and construct infrastructure
- Locate, design & construct necessary monitoring equipment to quantify benefits (e.g., meters, weirs, monitoring wells, etc.)
- Update appropriate model input files

Table 1. Summary of Available Surface Water Supplies from Water Year 1990 through 2021.

Creek	90Th Percentile Flow, CFS	Max Diversion Flow Rate, CFS	Max. Avg Annual Diversion Volume, AF	Expected Avg Annual Diversion Volume, AF (Note 1)
Badger Creek	26	24	700	700
Laguna Creek	325	225	7,300	1,000
Hadselville Creek	20	6	100	100
Jackson Creek	136	127	2,700	800
Dry Creek	412	392	10,500	1,000
		Total:	21,300	3,600

Notes:
1.) The expected near-term diversion volume is based on a maximum diversion of 15 CFS. Higher rates of diversion may be possible depending on site specific constraints and available funding.

Note: Model-calculated surface water flows suggest that 85% of available surface water for diversions are from flows in Dry and Laguna Creeks. The runoff would be directed to local percolation basins and/or dry wells for infiltration into the Basin if site suitability assessments confirm project feasibility.

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Flood-MAR Analysis

- Multi-benefit Flood-MAR Opportunities Analysis
- Determine recharge capacity
  - existing, + management actions
  - augmented, + management actions
- Desktop study supported by field data
- Draft Scope of Work developed by cbec eco engineering
  - Data Discovery
  - Field Data Collection and Monitoring
  - Hydrologic Model Development
  - Hydraulic Model Development and Simulation
  - Ecological Floodplain Inundation Potential Analysis (EcoFIP)
  - Reporting and Outreach

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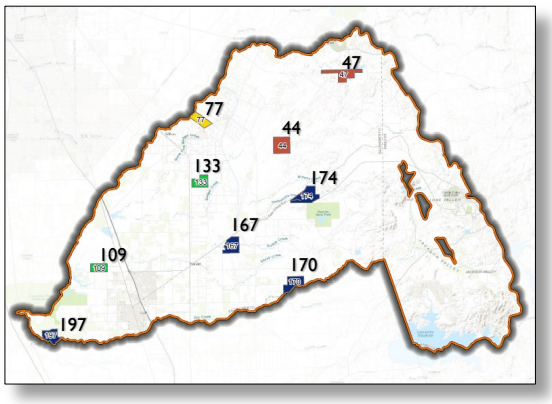
MANAGED AND NATURAL AQUIFER RECHARGE (2 OF 3)

ON-FARM STORMWATER CAPTURE

- Utilize data from the GSP and CoSANA model to identify high volume sites with acceptable soil conditions
- Rank candidate sites base on expected runoff volumes, expected infiltration rates & subsurface conditions
- CGA select up to 4 sites to secure access to
  - Confirm site suitability (geophysics/infiltration tests/source water and groundwater quality)
  - Plan & design diversion and recharge infrastructure for 1-2 sites
  - Approve plans and construct infrastructure
- Locate, design & construct necessary monitoring equipment to quantify benefits (e.g., meters, weirs, monitoring wells, sampling stations, etc.)
- Update appropriate model input files



Note: Map shows example land parcels with model-calculated average (1990-2021), annual runoff in acre-feet (AF).

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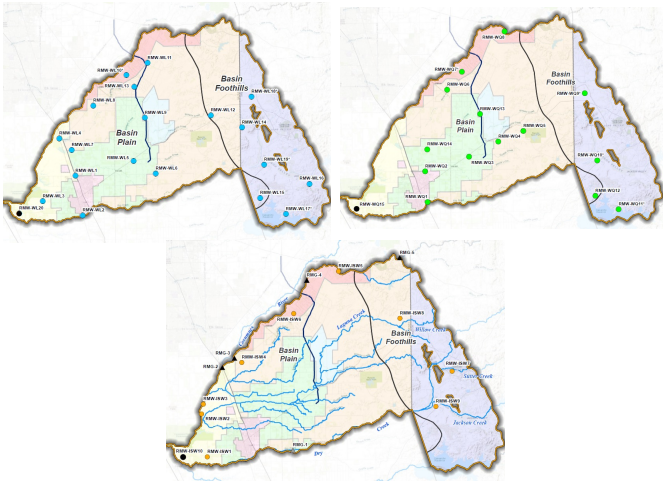
REPRESENTATIVE MONITORING NETWORK IMPROVEMENTS

- The SGMA Monitoring Network (RMWs) provides data to evaluate Sustainable Management Criteria (SMCs) and assess Sustainability Indicators for the Basin
- Multiple data gaps within the networks were identified in the GSP
- Improving the monitoring network includes the following task
  - Downhole video log/surveying of current RMWs
  - Construct monitoring well sites located near DACs, GDEs areas, and within the mapped cone of depression
  - Expand the network of supplemental domestic and agricultural wells to confirm the SGMA monitoring network is representative. (supplemental wells do not have assigned SMCs)
- Update appropriate model input files



Note: Wells and other relevant monitoring infrastructure installed as part of the demonstration projects will be incorporated into the SGMA Monitoring Network as appropriate to also fill identified data gaps.

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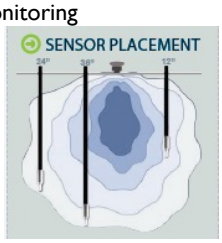
WATER CONSERVATION

- Additional outreach to landowners
- Use updated land use data (work task under Land Repurposing project) and update ET estimates to refine consumptive use estimates
- Identify & rank candidate demonstration project sites based on site conditions (soil characteristics, land uses, current irrigation & water practices, & conduciveness to testing selected BMPs)
- CGA select up to 4 sites to secure access for
  - Site inspection by Agricultural Consultant
  - Identify recommended BMPs & plan/design conservation activities
  - Approve plans & construct necessary field modifications and necessary infrastructure
- Locate, design & construct necessary monitoring equipment to quantify benefits (e.g., scensorsy, meters, weirs, monitoring wells, etc.)
- Update appropriate model input files

Soil moisture monitoring



Flow meter monitoring

Note: Commercially available weather stations can be installed along with other tracking equipment to measure and record soil moisture, water flows, water levels, and climate data at strategically placed stations in the basin.

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DEMAND MANAGEMENT PROJECT (COMPONENT)

1. Deficit Irrigation Pilot Project
   - Partner: UC Ag Extension (Livestock)
   - Goal: Assess effects, if any, on reducing irrigation on pasture by 10%
   - Design:
     - Set up 3 paired test plots: with and without deficit irrigation
     - Within each field, 3 enclosures sampled 3 x/year for mass, forage variety, forage quality for 2 years
     - Analyze results
   - Deliverable: Make recommendations on benefits/limitation of deficit irrigation
     - Info will support conservation efforts and incentives/compensation for participation
     - Factsheet, community meeting, outreach

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DEMAND MANAGEMENT PROJECT

2. Land Repurposing Pilot Project

- Part 1 Purpose: evaluate use of Land IQ ET system for assessing consumptive water use
  - Install 3 stations on fields of interested farmers with irrigated pasture, alfalfa, corn
  - Collect 2 years of baseline data on ET
- Deliverable: Summarized data on ET use for 3 high water use crops
  - Useful for future land repurposing projects
  - Useful for model refinement, 5-year update
  - Report summarizing findings, community meeting, social media, etc.

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DEMAND MANAGEMENT PROJECT

- Part 2 Purpose: evaluate benefits / costs of specific land repurposing practices
  - Working with 3 interested farmers with baselines ET data, apply land repurposing practice (to be selected by farmers)
  - Measure change in ET over 1 growing season, possibility to extend to 2 seasons with DoC or CGA support
- Deliverable: Report results of pilot project,
  - Hold community meeting to discuss results, outreach via social media and other outlets.
  - Lessons learned can inform future land repurposing activities

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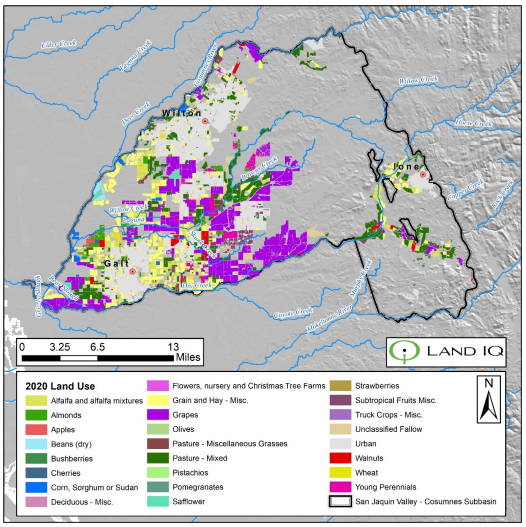
VOLUNTARY LAND REPURPOSING

- Additional outreach to landowners
- Update land use map & data
- Develop scoring framework to identify & rank sites for possible projects
  - Land characteristics
  - Revenue generated by existing use
  - Landowner preferences
  - Implementation timeframe & estimated benefits
- Identify 2 to 3 demonstration projects
- Locate, design & construct necessary monitoring equipment to quantify benefits (e.g., meters, weirs, monitoring wells, etc.)
- Update appropriate model input files



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