



**PROJECT MEETING
VINA SUBBASIN
GSP IMPLEMENTATION
MAY 18, 2021**



AGENDA

- ▶ COSTS
- ▶ GSA OPERATIONS
- ▶ MONITORING AND REPORTING
- ▶ DATA GAPS – COMPLIANCE VS IMPROVEMENTS
- ▶ GSA MOVING FORWARD
- ▶ PROPOSED PMAS
- ▶ DISCUSSION

GSA Operations

Monitoring and Reporting

Data Gaps

PMAs

COSTS

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GSA OPERATIONS





VINA GROUNDWATER SUSTAINABILITY AGENCY COSTS

- ▶ Joint Powers Agreement
 - ▶ Financial Terms
 - ▶ Cited SGMA fee authority
 - ▶ No employees
 - ▶ In-kind Member agency staff support
 - ▶ Member Agency voluntary contributions
- ▶ In-kind Member Agency Staff Support
 - ▶ Board meetings
 - ▶ Webpage
 - ▶ Administrative Functions
 - ▶ GSP Chapters
 - ▶ Notification

- ▶ Member Agencies Voluntary Contribution
 - ▶ \$5,000 per year per Member Agency
 - ▶ \$15,000 annual budget
- ▶ Contributions Support
 - ▶ Legal Services Contract
 - ▶ Insurance
 - ▶ Audit
 - ▶ Webpage

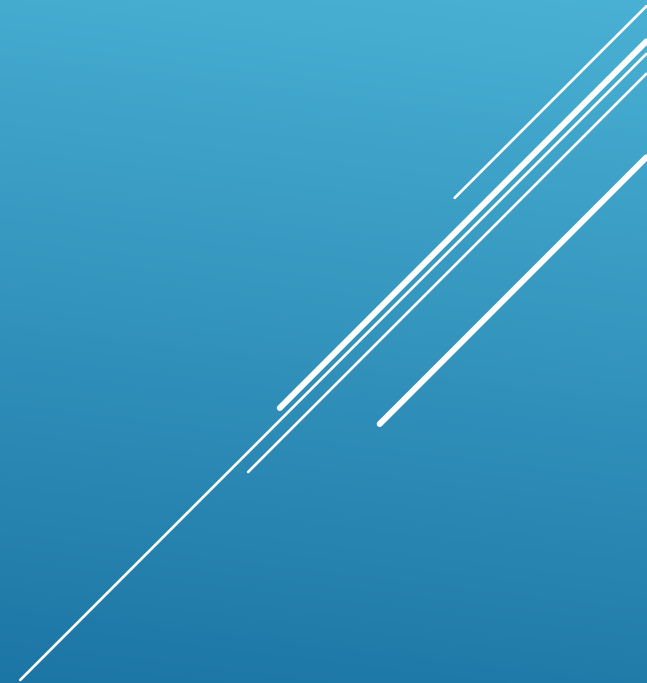
VINA GROUNDWATER SUSTAINABILITY AGENCY COST

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VINA GROUNDWATER SUSTAINABILITY AGENCY COSTS

- ▶ Current Structure
 - ▶ Geared towards developing the GSP
 - ▶ May cover some GSP implementation actions (e.g., annual report, monitoring)
 - ▶ New responsibilities of the Vina GSA will need a fund source (e.g., grants, fees)
- ▶ Potential New Responsibilities
 - ▶ Investigations
 - ▶ Projects
 - ▶ Additional data collection (e.g., pumping data)
 - ▶ Ordinances

MONITORING AND REPORTING



ANNUAL MONITORING – POTENTIALLY COVERED BY THE BUTTE
COUNTY MONITORING PROGRAM

ANNUAL REPORTING - POTENTIALLY COVERED BY THE BUTTE COUNTY
ANNUAL GROUNDWATER STATUS REPORT

RESPOND TO DWR COMMENTS TO GSP - \$20,000 - \$80,000
FIVE YEAR UPDATES - \$50,000 TO \$100,000

Monitoring and Reporting

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DATA GAPS



Compliance Data Gaps

- Stream Aquifer Interactions
- Domestic Well Survey

Data Improvements

- Groundwater Monitoring Network Improvements
- Groundwater Recharge Assessment
- Further Evaluate Bottom of Subbasin
- Refine Hydrogeologic Model
 - AEM Survey
 - Connectivity between Aquifer Zones

Data Gap - Stream Aquifer Interactions

- Stream gauges and Shallow Groundwater Monitoring Wells
 - Stream Gauges – Three Staging Areas - \$30,000 - \$50,000
 - Monitoring Wells - \$350 - \$450 per foot
 - One 100 Foot Well - \$35,000 to \$45,000
- Assessments - \$20,000 - \$50,000
- Development of Appropriate SMCs - \$20,000 - \$40,000

COMPLIANCE DATA GAPS

Data Gap Domestic Well Depths

- Domestic Well Survey - \$20,000 - \$50,000
 - Identify Active Domestic Wells
 - Evaluate Total Depths and Screen Intervals
 - Evaluate Maintenance Records
 - Create Site for Reporting Dry Wells

COMPLIANCE DATA GAPS

Grants

- ▶ TSS Grants for Wells
- ▶ Prop 68
Implementation
Grants
 - ▶ Structures need to
be associated with
PMA
- ▶ Other DWR funds
- ▶ USDA opportunities

Fees

FUNDING MECHANISMS

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PROPOSED PMAS



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- ▶ Stream Augmentation
- ▶ Agricultural Irrigation Efficiency
- ▶ FloodMAR
- ▶ Rangeland Management
- ▶ Watershed Health
- ▶ Domestic Well Mitigation
- ▶ Education
- ▶ Landscape Ordinance
- ▶ Groundwater Allocation

STREAM AUGMENTATION

- ▶ Potential to Increase Stream Flow
- ▶ Vina GSA, RCRD, Paradise ID, PG&E
- ▶ Evaluate the availability of water to augment stream flows
- ▶ Yield 1-10K AF
- ▶ Costs: TBD
- ▶ Benefits: depletion to interconnected streams & GW levels

AG IRRIGATION EFFICIENCY

- ▶ Review Irrigation Practices
- ▶ Vina GSA
- ▶ Adopt irrigation efficiency improvements
- ▶ Costs: TBD
- ▶ Benefits: GW levels

FLOODMAR

- ▶ FloodMAR Evaluation
- ▶ Vina GSA & RCRD
- ▶ Evaluate potential for FloodMAR
- ▶ Costs: TBD
- ▶ GW levels

RANGELAND MANAGEMENT

- ▶ Rangeland Management and Water Retention
- ▶ Chico State
- ▶ Develop, implement and measure adaptive grazing practices
- ▶ Costs: TBD
- ▶ GW levels

FUEL MANAGEMENT FOR WATERSHED HEALTH

- ▶ Upper Watershed Recharge
- ▶ Chico State Enterprises
- ▶ Evaluate potential for fuel management projects
- ▶ Cost: 2-3K per acre
- ▶ Benefits: GW Levels, Reduction of Storage, Water Quality, surface water depletion

DOMESTIC WELL MITIGATION

- ▶ Evaluate Domestic Wells
- ▶ Vina and RCRD GSA
- ▶ Develop registry of domestic wells
- ▶ Costs: TBD
- ▶ Benefits: GW levels

EDUCATION

- ▶ Community Water Education Initiative
- ▶ CSU Chico – Center for Water and Env
- ▶ Community education
- ▶ Costs: TBD
- ▶ Benefits: GW levels, Water Quality, etc.

LANDSCAPE ORDINANCE

- ▶ Landscape Ordinance
- ▶ Butte County & City of Chico
- ▶ Revised ordinance for new development and conservation
- ▶ Costs: TBD
- ▶ GW levels, water quality, etc.

GROUNDWATER ALLOCATION

- ▶ Groundwater Allocation
- ▶ Vina GSA and RCRD
- ▶ Evaluate GW allocation
- ▶ Costs: TBD
- ▶ Benefits: GW levels, Water quality, etc.

DISCUSSION