Salinas Valley Basin
Groundwater Sustainability Agency

Funding Mechanisms Workshop

January 26, 2021

Introduction and Outline of the Workshop

- Broad overview of funding mechanisms and alignment with SVBGSA needs for achieving and maintaining sustainability for the Basin
- Look briefly at existing SVBGSA fee purpose
- Review opportunities associated with state and federal programs
- Legal mechanisms for funding – presented by Les Girard, Monterey County Counsel
- Programmatic and Project Funding – pumping charge program – presented by West Water

GSP Development

- Broad overview of funding mechanisms (today)
- Specific subbasin discussions at March/April meetings
- Subbasin feedback (general approach) used for GSP Chapter 10
- Ultimately a GSA Board decision

Successful Financing Strategy = Sustainability

SVBGSA Groundwater Sustainability Fee

Fee is a regulatory fee per Sustainable Groundwater Management Act, Water Code 10730, adopted pursuant to California Constitution

- Agricultural Fee
- Connection Fee

These fees will incrementally increase as SVBGSA begins to operationalize its work towards sustainability of the subbasins

We acknowledge our stakeholders do pay other fees

Groundwater Sustainability Fee

Purpose:

Keep local control and accountability for groundwater management.

Avoid State intervention and imposition of very high fees.

Use of the Fee:

Fund operational (administrative) costs of running the GSA including monitoring and annual report

Fund preparation and updates of the Groundwater Sustainability Plans in combination with state grants (Prop 1 and Prop 68)

Fund a prudent reserve

Planning Funding Securing Our Groundwater Future

Other Tools in the Funding Bucket: Grants and Loans

- State continues with robust grant and loan programs and we expect these opportunities to continue
- Infrastructure grants may come soon as stimulus
- Readiness is key to successful grant applications
- Partnerships can be key to maximizing match and other requirements of grants
- Loans may be strategic but will require declared revenues for repayment
- The SVBGSA Funding Plan will look to all opportunities and will focus on subbasin level initially but will be an agencywide plan

Legal Authority for Funding Mechanisms

- California Constitution limits how local governmental entities may raise revenue.
- Articles XIII and XIIIA – D govern the imposition of taxes, assessments and fees.
- Propositions 13 applied the first limit on how local governments could impose or raise property taxes.
- Propositions 218 and 26 followed with additional limitations as local governments found ways to circumvent or avoid Prop 13's limits.

Four General Methods

- Taxes
- Assessments
- Fees
- Fines and penalties

Taxes

SVBGSA is a local “special purpose district” for tax.

General taxes are levied for general revenue raising purposes and may be used for any lawful purpose. Examples include ad valorem property taxes and most sales taxes. Requires a majority vote of the electorate.

SVBGSA cannot impose general taxes.

Special taxes are levied for specific purposes and may be used for the specific purpose only. Examples include a parcel tax and some sales tax components. Requires a 2/3 vote of the electorate.

SVBGSA may impose special taxes.

Benefit Assessments

- Assessments may be levied solely based upon the special benefits conferred; cannot be used to pay for general benefits (such as police and fire).

- Assessments require the identification of the special benefit to be conferred (typically a capital project), the cost of the benefit, the zone of benefit, and the method of calculating the assessments to be levied.
  - Not all who are assessed receive benefits in the same proportion; assessment amounts may vary.

- An engineer's report details these factors.

- Imposition of benefit assessments requires a public hearing and is subject to a majority protest.

Fees

- Fees may be imposed for a variety of purposes including:
  - Funding a regulatory program, or
  - Providing a product or service.

- Fees are not subject to a vote or protest proceeding but cannot exceed the cost of running the program, or the cost of providing the product or service.

SGMA is a regulatory program (some also consider it a service) implemented through state law.

Other regulatory programs (extraction reporting and other management actions) need to be implemented via ordinance.

Fines and Penalties

- Fines and penalties may be imposed by a local government (including the GSA) for a violation of law.
  - GSA ordinance will be necessary to implement the regulatory program or other requirement, the violation of which would be subject to a fine or penalty.
  - Ordinance establishes the level of fine or penalty.

- Imposition of a fine or penalty must provide due process – usually a hearing after notice/citation and before assessment of the fine or penalty

- Fines and penalties must be put back into the program and may reduce the fee.

SVBGSA Subbasin Planning Committees Workshop

Pumping Charges and Water Markets

January 27, 2021

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1. WestWater Overview

WestWater Overview

Our Firm

Water Resources Economics, Transaction, and Policy Advising

National Reach and Regional Expertise

Bringing Financial Perspective

Navigating Local SGMA Development

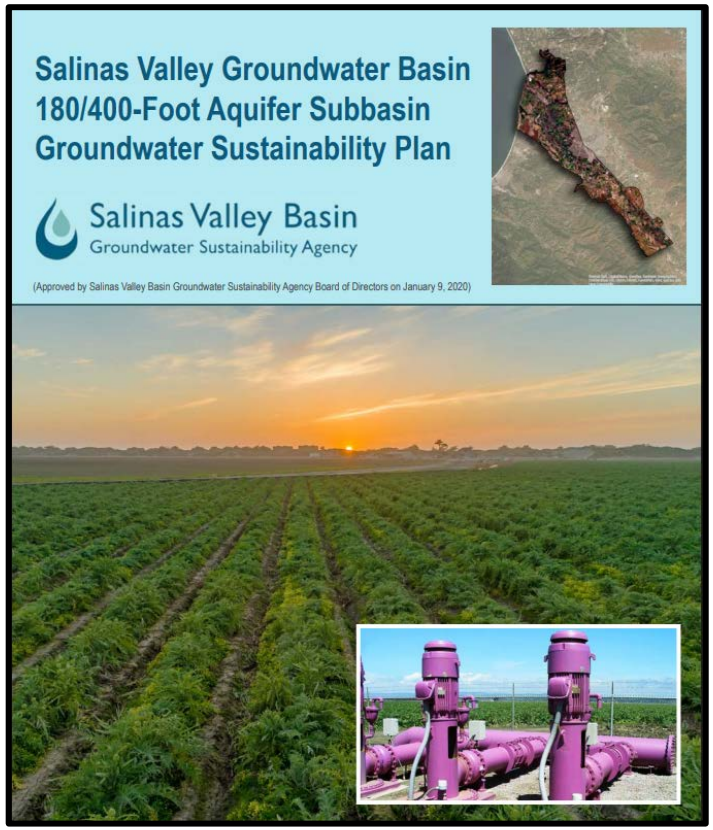
Experienced Sustainability Program Implementers

WestWater Offices & Selected Project Locations

Main Office	West Coast	Pacific Northwest	Southwest	Intermountain
Clay Landry Boise, ID	Bryce McAteer Sacramento, CA	Harry Seely Bush Prairie, WA	Matt Payne Phoenix, AZ	Brett Bovee Fort Collins, CO
208-433-0255	916-426-6286	360-695-5233	602-595-7009	970-672-1811

WestWater Overview

Our Work in the Salinas Valley



- **Performed economic feasibility analyses on new supply acquisitions and other projects**
- **Designed a water charges & allocations framework**
- **Developed and recommended a multi-tier fee structure for future project funding**
- **Currently engaged with SVBGSA to explore development of a Water Charges Framework for the 180/400-Foot Aquifer**

9.2 Water Charges Framework

The proposed water charges framework is the fundamental structure for managing groundwater pumping and funding projects. This framework is designed to achieve two important outcomes:

1. Promote voluntary pumping reductions; and
2. Fund new water supply projects by charging fees for various levels of pumping.

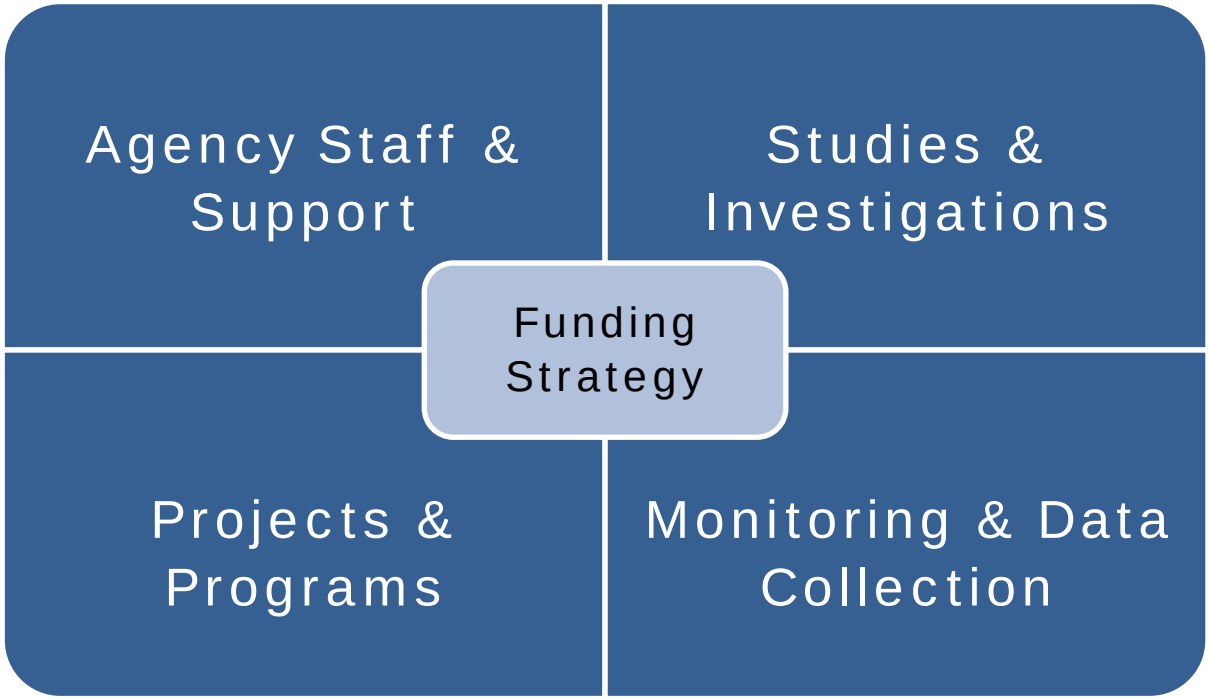
2. Pumping Charges and Water Markets

Topics

1. **The Need for Funding**
2. **Water Charges**
3. **Water Markets**

What Needs to be Funded

SGMA implementation requires a funding strategy that addresses various administration and program needs.



Common SGMA Projects

Projects are likely to require the largest degree of future funding due to their size and scope.

Municipal Conservation

Water Offset Programs

Invasive Species Removal

New Supplies & Infrastructure

Irrigation Improvements

Land Repurposing

Rotational Fallowing

Urban Retrofits

Extraction Allowance

Funding SGMA Implementation

There are a variety of common funding methods that agencies can use to fund their SGMA projects and management actions.

Fees and Charges*

- **Benefits**:
  - Direct, local source of funding
- **Considerations**:
  - Stakeholder outreach is critical
  - Requires careful implementation (noticing, studies, voting, protest)
  - Legal compliance (Proposition 218, others)

Grants

- **Benefits**:
  - Multiple sources
  - Very low cost source of funding
- **Considerations**:
  - May only fund portions of a project's development
  - May limit development flexibility

Bonds and Borrowing

- **Benefits**:
  - Low cost source of large funding
- **Considerations**:
  - Limited to projects
  - Must demonstrate existing revenue streams
  - Encumbers futures revenues

Public-Private Partnership

- **Benefits**:
  - Risk sharing
  - Private sector efficiencies
- **Considerations**:
  - Relatively expensive source of funding
  - May limit operational flexibility

The Need for Local Fees and Funding

Local fees and charges (i.e. revenue sources) are a prerequisite to other outside funding sources.

Bonds and Borrowing

GSAs need revenues to **service debt.** Banks will not issue bonds unless they can secure commitments and evidence of viable funds to pay back lenders.

Grants

Grants often require an **agency cost share.** GSAs cannot share costs unless they have revenues to finance their portion of a project's costs.

Public-Private Partnership

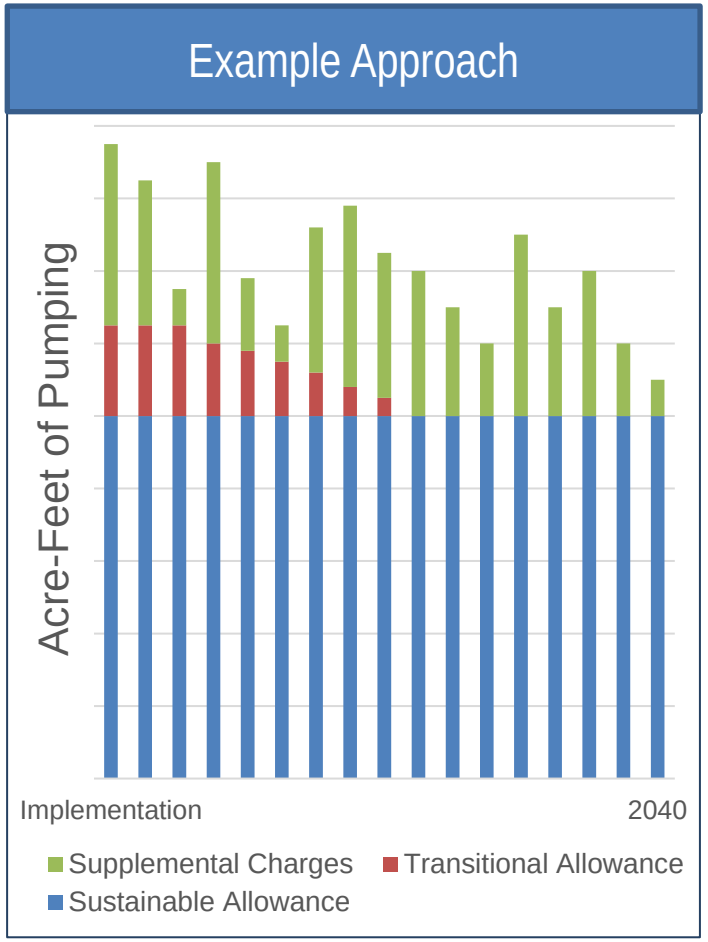
Private partners may manage and/or fund a project up front, but the public partner must make **future payments** over the project's lifetime. GSAs can only pay if they have revenue.

Developing a Project Funding Strategy

Timeline	Item	Key Questions
GSP Development	Issue Identification	What is the scope and scale of the Problem we are trying to solve?
	Stakeholder Representation	Who is being impacted by the Problem? Who will be impacted by its Solution(s)? How will they be represented?
	Options Assessment	What Options do we have to address the Problem and how much do they Cost?
GSP Implementation	Iterative Development	What should our Solution(s) look like? What is the timeline and/or trigger for their implementation?
	Acceptance & Outreach	Are Stakeholders aware of and do they support the chosen Solution(s)?
	Implementation	Go!

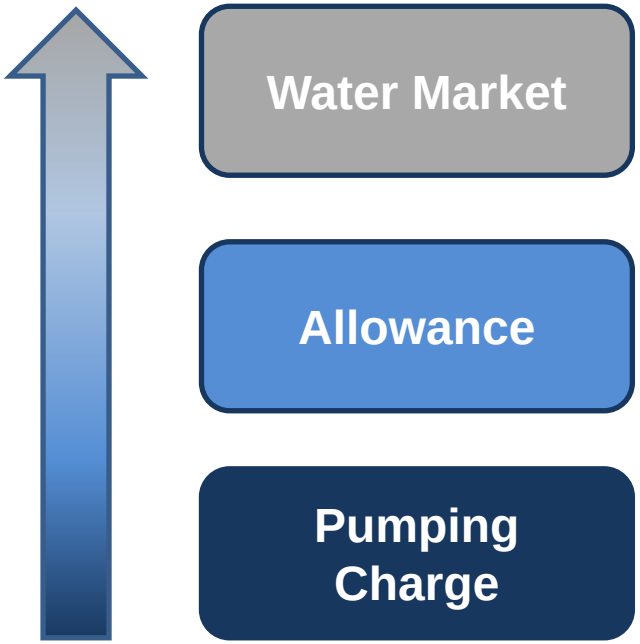
180/400: Water Charges Framework (WCF)

- **What it is**: A tiered system of groundwater pumping allowances with associated fees used to fund local projects and management actions
- **What it's not**: An enforced limitation of pumping
- **What it does**:
  - Allows groundwater users to make individual financial decisions
  - Incentivizes water management innovation
  - Identifies a glide path toward sustainable pumping
  - Provides a source of funding for other SGMA activities (incl. supply acquisition)
  - Encourages groundwater pumping reductions
- **What it can enable**:
  - A water market!



Potential WCF Structures for 2020 GSPs

Depending on a subbasin's needs and objectives, the Water Charges Framework can be structured to incorporate additional features that build on each other.



Rules that enable for the transfer of allocated allowances among eligible entities.

Defined distribution of specific volumes of water permitted for use on an individual basis.

A use-based charge associated with groundwater pumping and used to fund SGMA projects and management actions.

Charges, allowances, and markets could be at a regional, basin-wide, and/or specific to management areas.

Pumping Charges and Water Markets

Benefits and Challenges of WCF Options

Option	1 Pumping Charge	2 Allowance	3 Water Market
Benefits	• Variety of approaches (e.g. volumetric, acreage, service area) • Simpler to implement (no allocation). • Can finance projects	• Financial incentives to decrease use • Ensures more precise monitoring of groundwater use and withdrawals • Identifies pathway toward sustainability by acknowledging limits	• Enables maximum flexibility to adapt to limited supply conditions • Maintains financial incentives • May encourage development of local water supply projects
Challenges	• No financial signal to incentivize decreased pumping • Charge basis may be considered inequitable • No concept of nor penalty for "overuse"	• Less flexible and economically less efficient than a market • Building consensus on the allocation approach can be a lengthy process • Sufficient monitoring and accounting systems need to be developed	• Administrative infrastructure, policies, and rules need to be worked through • Potential impacts (i.e. "externalities") require proper mitigation strategies • Balancing adaptive management with reasonable levels of future certainty

Example Scenarios

Example

1 Drought Charge Program

Setting / Issue / Approach

- A subbasin has historically pumped more than the sustainable yield only during drought conditions.
- Drought-induced impacts occur and need to be addressed.
- Projects and programs that can promptly address drought-induced groundwater impacts are in place, scalable, and can be implemented on-demand, such as:
  - Dry Well Program
  - Seasonal Fallowing
  - Limited Groundwater Replacement

2 Regional Charge Program

- A subbasin or portion of a subbasin has groundwater sustainability issues that are present in most or all year types.
- Causes and impacts of the sustainability issues need to be addressed.
- Projects and programs that balance the water budget and manage other impacts are implemented and maintained over the long-term, such as:
  - Dry Well Program
  - Strategic Land Retirement
  - Mitigation Projects (e.g. seawater intrusion barrier)
  - Development of New Water Supplies

3 Water Market

- A subbasin has structural groundwater deficits and/or stakeholders are seeking more flexibility and certainty.
- Groundwater overdraft is causing impacts that need to be addressed.
- Projects and programs that balance the water budget, manage other impacts, and enhance options for individual water management are implemented and maintained over the long-term, such as:
  - Water Market
  - Development of New Water Supplies
  - Reduction of Groundwater Demand

What Does a Well-Functioning Market Do?

Provide Certainty

Create Value & Reduce Financial Impacts

Enable Flexibility

Incentivize Innovation

Manage & Mitigate Potential Impacts

Recognize Scarcity

Next Steps for the Salinas Valley

- **Evaluation:**
  - What are our groundwater conditions and water budget?
  - What projects and management actions are needed to reach sustainability?
- **Implementation:**
  - What are we doing?
  - When are we doing it?
  - How will it be accomplished?
- **Integration:**
  - Do some projects benefit multiple basins?
  - Would it benefit stakeholders to enable regional programs (e.g. water market)?

3. Discussion

Appendix

Appendix

Questions when Developing a Water Market

- **Budget:** What are the water supplies of the basin?
- **Asset:** What is it that can be credited, debited, or transferred?
- **Allocation:** How is water allocated and to whom?
- **Costs:** What are the fees?
- **Participation:** Who can be buyers and sellers?
- **Transferability:** What are the rules?
- **Trading**: How are transfers facilitated?
- **Prices**: What is market value and how is it discovered?
- **Accounting**: How is use monitored?
- **Banking**: How long can unused supplies be stored?
- **Recharge**: Can credits be generated through groundwater recharge?
- **Impacts:** How are negative third-party impacts (social, enviro.) avoided?
- **Adaption**: As basin conditions change, how does the market adapt?

Appendix

Water Accounting and Transfers Example

Sustainable Yield Allowance	
Volume (AF)	Cost ($/AF)
100	$10

Transitional Allowance	
Volume (AF)	Cost ($/AF)
50	$100

Recharge Project Credits	
Volume (AF)	Cost ($/AF)
100	n/a

Overuse Penalty Fee	
Volume (AF)	Cost ($/AF)
n/a	$1,000

Event	Debit	Credit	Balance	Cost	Payee
Groundwater Used to Irrigate Vineyard	-400 AF				
Debit Sustainable Yield Allowance		+100 AF	-300 AF	$1,000	GSA
Debit Recharge Project Credit		+100 AF	-200 AF	n/a	
Transfer and Use 100 AF from Seller		+100 AF	-100 AF	$8,000	Seller
Debit Transitional Allowance		+50 AF	-50 AF	$5,000	GSA
Pay Overuse Penalty Fee		+50 AF	0 AF	$50,000	GSA

Appendix

A Case Study: Rosedale-Rio Bravo WSD

- **Who:** Rosedale-Rio Bravo Water Storage District (in collaboration with EDF, WestWater, and others)
- **What**: A water accounting and trading platform
  - Provides growers with a tool for tracking water use
  - Utilizes remote ET sensing as monitoring method
  - Enables transfers, and associated groundwater model can evaluate impacts
  - Fees are assessed to fund sustainability
- **Why**:
  - Fund the least-cost methods of achieving sustainability
  - Water is an asset if it can be managed (and can be a liability if stranded)
  - Lack of transfers exacerbates SGMA's economic impacts