Santa Cruz
Mid-County Groundwater Agency

Santa Cruz Mid-County Groundwater Basin

Funding Options Technical Memorandum

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Abstract

This Technical Memorandum ("Memorandum" or "Memo") provides a preliminary evaluation of potential funding mechanisms to support the Santa Cruz Mid-County Groundwater Agency's ("MGA") ongoing compliance with the Sustainable Groundwater Management Act ("SGMA") and implementation of its approved Groundwater Sustainability Plan ("GSP") for the Santa Cruz Mid-County Groundwater Basin ("Basin"). Prepared as a decision-support resource, the Memorandum reviews legal, financial, and policy considerations relevant to establishing a long-term, reliable, and equitable funding strategy tailored to the Santa Cruz Mid-County Groundwater Basin.

SGMA, enacted in 2014, established a statewide framework for sustainable groundwater management but did not provide ongoing funding for local implementation, creating an unfunded state mandate. While MGA has successfully secured significant state grant funding and relied on Member Agency contributions to date, grants are limited and competitive, and therefore not necessarily sufficient to meet long-term operational and compliance needs. The Memorandum reviews MGA's historical and current funding structure, including its Joint Powers Agreement and existing cost-sharing arrangement among Member Agencies, and evaluates the need for periodic reassessment of these contributions.

To inform this assessment, MGA reviewed funding approaches adopted by 32 other Groundwater Sustainability Agencies across California, examining legal authorities, rate methodologies, treatment of private domestic well users, and allocation structures. The Memorandum outlines commonly used funding methodologies – including volumetric (extraction-based), land-based (parcel or acreage), irrigated acreage, and hybrid approaches—and discusses considerations of proportionality, equity, administrative feasibility, and legal defensibility.

The analysis highlights the need to balance precision and fairness in cost allocation with administrative practicality and transparency. It also considers whether certain costs should be broadly shared across all beneficiaries or allocated to user groups with more direct impacts on groundwater sustainability. The Memorandum does not recommend a specific funding mechanism, nor does it exhaustively evaluate all possible options. Instead, it presents an initial framework to support further deliberation. The next phase of the process will involve formation of an ad hoc group of Agency members to evaluate the options and develop a recommended funding approach for MGA's long-term sustainability and governance needs.

I. Introduction

The purpose of this Technical Memorandum ("Memorandum" or "Memo") is to provide a detailed overview of the various funding mechanisms best suited to support groundwater management and GSP implementation in California, and to evaluate these options in the context of the Santa Cruz Mid-County Groundwater Basin ("Basin") and the Santa Cruz Mid-County Groundwater Agency ("MGA" or "GSA"). This report will ultimately serve as a decision support tool that the Agency can utilize when determining the most appropriate funding strategy for the MGA.

To support continued compliance with SGMA, MGA is evaluating options to fund necessary activities to comply with SGMA. This Technical Memorandum ("Memorandum"), prepared by SCI Consulting Group ("SCI Team"), presents preliminary findings and analysis in exploring funding strategies to support MGA's operational and programmatic objectives. This analysis is grounded in legal, financial, and policy considerations, with the intent of guiding the Agency toward an equitable and practical funding mechanism tailored to local needs and conditions. For the Santa Cruz Mid-County Basin, any funding approach must be carefully designed to reflect local groundwater conditions, governance structure, and community values – while remaining flexible, transparent, and adaptive to future needs.

The Unfunded State Mandate

The California Legislature enacted the Sustainable Groundwater Management Act in 2014, establishing the first statewide framework for the sustainable management of groundwater resources. To achieve this, the law requires the formation of local Groundwater Sustainability Agencies ("GSAs") in all medium- and high-priority basins, which are tasked with developing and implementing Groundwater Sustainability Plans.

Although SGMA provides the legal framework for local groundwater sustainability, it remains an unfunded state mandate – placing the responsibility of securing long-term funding on local agencies. To help offset this financial burden in the near term, the state has offered grant funding opportunities to GSAs to support GSP development and implementation. This funding has played a critical role in supporting early SGMA implementation efforts statewide, providing essential resources for planning, technical studies, and capital investment. Since its inception, MGA has successfully obtained significant grant funding from the California Department of Water Resources ("DWR") to offset costs associated with developing and implementing the Mid-County Basin GSP ("GSP"). However, grants are typically competitive, limited in scope, and contingent on state budget cycles – making them impractical as a reliable long-term funding source to support ongoing operational and compliance costs.

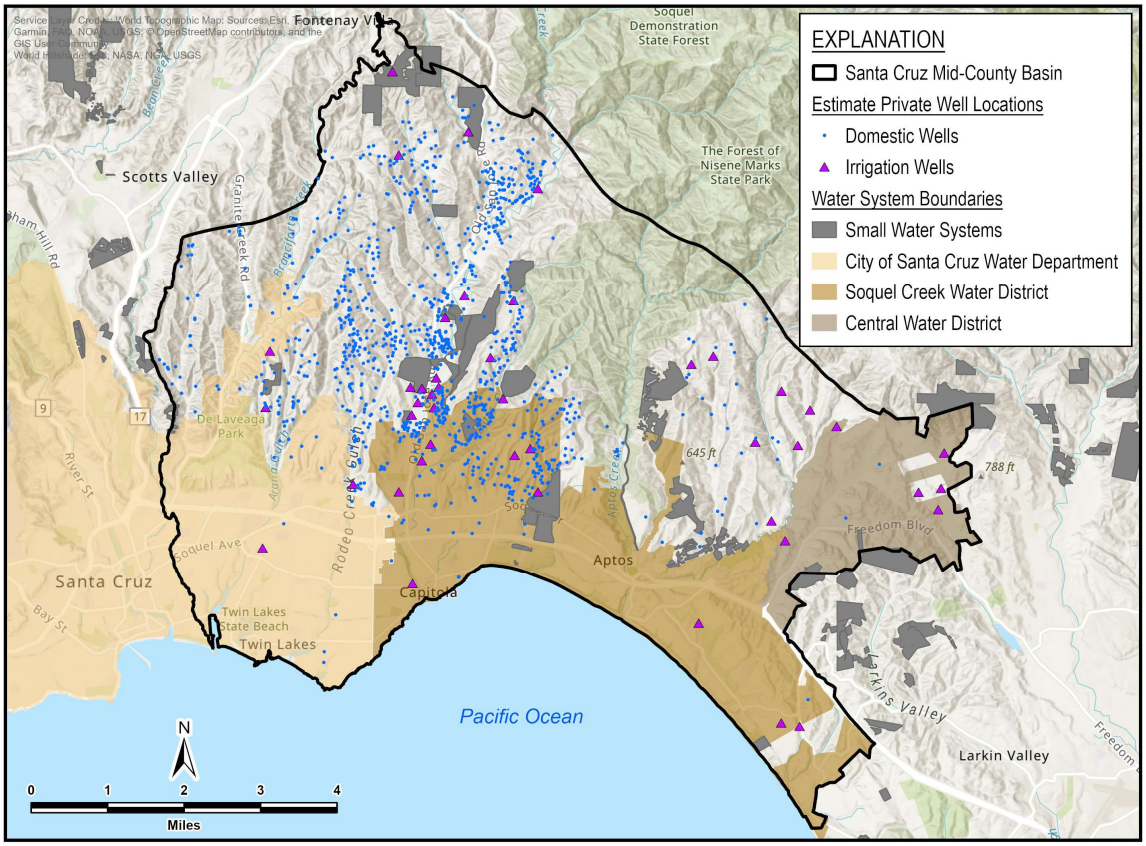
It is important to note that SGMA implementation represents a relatively new area of water resource management, and funding mechanisms in support of GSP implementation continue to evolve across California. As part of this funding options assessment, MGA compiled and reviewed information on how 32 other GSAs have approached long-term funding. This review examined the legal authority used, the methodology and rate structure, whether private domestic groundwater users were assessed fees, and groundwater use volumes of various user classes within each GSA. A summary table is included as Appendix A and summary data from these GSAs is included to support discussion as appropriate throughout this Memorandum.

Background on MGA and its Funding Strategies

The Santa Cruz Mid-County Groundwater Agency was formed in 2016 through a Joint Powers Agreement[1] (JPA) between four member agencies: the Soquel Creek Water District ("SqCWD"), Central Water District ("CWD"), City of Santa Cruz ("City"), and the County of Santa Cruz ("County"). These four members were the only agencies entering into the JPA under SGMA because the law requires that a GSA formed under a JPA consist of local public agencies with water supply, water management, or land use responsibility in a groundwater basin. Figure 1 below shows the Basin boundary, the water service areas of SqCWD, the City, and CWD, other small water systems, and other estimated locations of private wells. The small water systems and private users are not considered local public agencies, so the County has used its water management and land use authority as part of the JPA to ensure that the entire Santa Cruz Mid-County Groundwater Basin ("Basin") is covered under SGMA. MGA serves as the designated GSA for the Basin, identified by the California Department of Water Resources ("DWR") as a high-priority basin under critical overdraft. Despite the limitations of what entities can enter into the JPA, MGA is governed by a Board of Directors consisting of two representatives from each member agency and three private well owner representatives to ensure broad representation throughout the Basin.

[1] https://www.midcountygroundwater.org/governing-documents/

Figure 1 - Santa Cruz Mid-County Groundwater Basin



Groundwater management in the Santa Cruz Mid-County Basin builds on decades of regional collaboration and technical monitoring, reflecting the community's long-standing recognition of groundwater as an essential local resource. The Basin provides the primary water supply for much of the Mid-County region, serving residential, agricultural, and institutional users across both municipal and private systems. Groundwater conditions in the Basin are of particular concern due to its coastal setting and history of seawater intrusion, making sustainable management critical to maintaining water quality and supply reliability for the region's residents, economy, and ecosystems.

In 2017, MGA initiated development of its GSP, which was adopted by the Board in November 2019 and submitted to DWR in January 2020. The GSP outlines a comprehensive framework of projects, management actions, and monitoring programs aimed at achieving groundwater sustainability by 2040. In June 2021, DWR approved MGA's GSP following its technical review and determination of compliance with SGMA requirements. MGA continues to implement the Plan through annual reporting, monitoring, and coordination among its member agencies.

Since its formation, MGA leadership has discussed and considered both near-term and long-term funding imperatives. The JPA explicitly recognizes the power of the Member Agencies to cooperate in financing and managing the Basin, including the ability to assess costs and enter into agreements for financing. To date, MGA has relied on funding contributions from its Member Agencies and grant funding from the DWR to fund the costs to comply with SGMA, including development of the initial GSP, implementation activities such as Basin monitoring and technical studies, GSP annual reporting, and agency operations.

Historically, MGA and its Member Agencies have secured substantial grant funding to support efforts to comply with SGMA including GSP development and initial implementation activities. For example, in 2017 MGA was awarded a $1.5 million grant from DWR's Sustainable Groundwater Management Program to fund, in part, the development of the GSP. In 2019, DWR awarded $500,000 to expand the Basin's monitoring network and related activities. In 2022, MGA received a $7.6 million no-cost-share grant from the DWR's SGMA Implementation program to pursue components of its GSP implementation plan. More than $1.5 million of the 2022 award has funded MGA SGMA compliance expenses for monitoring, reporting, and other activities such this funding assessment that broadly benefits the entire Basin. The remaining $6 million was allocated to the MGA Member Agencies to help defray costs to implement capital projects such as aquifer storage and recovery, groundwater well development, and other planning work – which in turn reduce the burden of immediate funding needs on Member Agencies and users.

The current Member Agency contribution structure allocates 70% of SGMA compliance costs to SqCWD, and 10% to the remaining three Member Agencies (CWD, the City, and the County). This cost share was approved by the Board in 2017 and was developed based on the then-current understanding of Basin extraction at the time. Note that since the County does not extract groundwater itself, it has been contributing to generally represent the portions of the Basin outside the service areas of SqCWD, the City, and CWD in recognition that effective water management is beneficial to the County and there are negative consequences (e.g., State probation) associated with not complying with SGMA. The JPA notes that the Board will periodically review the proportional share of contributions by Member Agencies[2]. This Memorandum is intended to support such a review.

Section 1.3 of the GSP contemplates evaluation of funding mechanisms in this manner, including the potential application of fees and the fee criteria for non-de minimis and de minimis users.[3] The GSP section goes on to describe development of a cost allocation strategy that is equitable to Member Agencies and groundwater users, and that allocates a greater share of costs to users with greater impacts upon groundwater sustainability indicators in the Basin.

[2] JPA, 10.
[3] GSP, 1-9.

As a part of the impetus behind this memorandum, MGA is actively evaluating various revenue strategies to support its long-term groundwater sustainability obligations required by SGMA. These strategies include funding through modified Member Agency contributions, as well as fee, assessment, or tax-based mechanism to equitably distribute the cost burden associated with complying with SGMA among groundwater users in the Basin.

Report Organization

Section II of this Memorandum establishes key characteristics of the Basin. These include MGA costs under consideration for funding, related to SGMA compliance and administration. Because some funding mechanism legal frameworks include limitations on the use of funds they generate, the type of costs an agency accrues is a key consideration in determining the optimal approach to funding. This Section also describes Santa Cruz Mid-County Basin groundwater users, including municipal users, agricultural users, institutional users, and private domestic users (de minimis users[4]). The composition of groundwater users within a basin holds important implications for the structure of a funding framework.

Section III provides an overview of the various legal frameworks pertaining to local agency funding in California. This section describes self-funding (Member Agency funding), two mechanisms explicitly prescribed for GSA use in SGMA, and alternative options. This Section details legal authority, proportionality requirements, and implementation procedures relevant to these frameworks.

Section IV discusses funding methodologies, including charges based on the volume of groundwater extracted or consumed, irrigated acreage, acreage, and parcels. The methodology of a funding mechanism has a drastic effect on its structure. There are important considerations in evaluating various methodologies, which will inform the funding program's proportionality upon implementation.

Section V provides a discussion of key local considerations related to the options described in the previous Sections. This includes consideration of fairness and equity, cost drivers (e.g., who or what drives MGA costs), discussion of which groundwater users to include in a funding mechanism, and a series of conceptual preliminary rate scenarios intended to illustrate how MGA could structure its funding strategy.

[4] De minimis users are defined by Water Code § 10730 as those that extract less than two acre-feet per year for domestic purposes.

II. Santa Cruz Mid-County Basin Characteristics

The conditions of the Santa Cruz Mid-County Groundwater Basin are described in detail in the GSP[5]. The Basin underlies approximately 36,500 acres along the central coast of Santa Cruz County, extending from the City of Santa Cruz in the west to La Selva Beach in the east, and from the Santa Cruz Mountains to the Pacific Ocean. It encompasses portions of the City of Capitola, as well as the unincorporated communities of Aptos, Soquel, Live Oak, Seacliff, Rio Del Mar, Seascape, and Day Valley.

Groundwater use in the Basin is primarily municipal, with approximately 76% of extraction conducted by three of the four MGA Member Agencies (Soquel Creek Water District, Central Water District, and the City of Santa Cruz). In contrast with many priority basins across the State, agricultural groundwater use accounts for a relatively small percentage of extraction at approximately 7%. Other uses include private domestic groundwater use (approximately 12%) and institutional (or small water system) groundwater use (approximately 5%).

A. Basin Conditions and Approach

Santa Cruz Mid-County Basin Sustainability Indicators

Groundwater in the Basin has historically been heavily relied upon for municipal, domestic, and limited agricultural use, leading to declining groundwater levels and seawater intrusion in coastal areas. Seawater intrusion is the primary sustainability concern and a significant factor driving the Basin's designation by DWR as high priority and critically overdrafted.[6]

The Basin's hydrogeologic setting consists of several interconnected aquifer units: the Aromas Red Sands, the Purisima Formation, and underlying fine-grained deposits – that together form a complex coastal groundwater system.[7] Groundwater extraction over many decades that exceeds natural recharge has produced groundwater-level declines in the coastal portion of the Basin, which in turn have allowed seawater intrusion to advance inland.[8]

The Basin's Groundwater Sustainability Plan identifies six sustainability indicators, consistent with SGMA regulations, which are used to define, measure, and track Basin health (GSP Section 3.3):

1. Chronic lowering of groundwater levels – historically observed in coastal production wells, now targeted for recovery.

[5] https://sgma.water.ca.gov/portal/gsp/preview/11
[6] GSP, 1-2.
[7] GSP, 2-72.
[8] GSP, 2-35.

2. Reduction of groundwater storage – linked to prolonged drought and over-pumping.
3. Seawater intrusion – a critical condition already documented and actively monitored along the coast.
4. Degraded water quality – primarily from saltwater intrusion and localized constituents.
5. Land subsidence – not a current issue in the Basin but monitored as a precaution.
6. Depletion of interconnected surface water – relevant where groundwater supports baseflow in streams and riparian habitat.

The GSP establishes measurable objectives and minimum thresholds for each sustainability indicator, supported by a network of monitoring wells distributed across coastal and inland subareas. Data from these indicators guides implementation of projects and management actions intended to achieve sustainability by 2040.

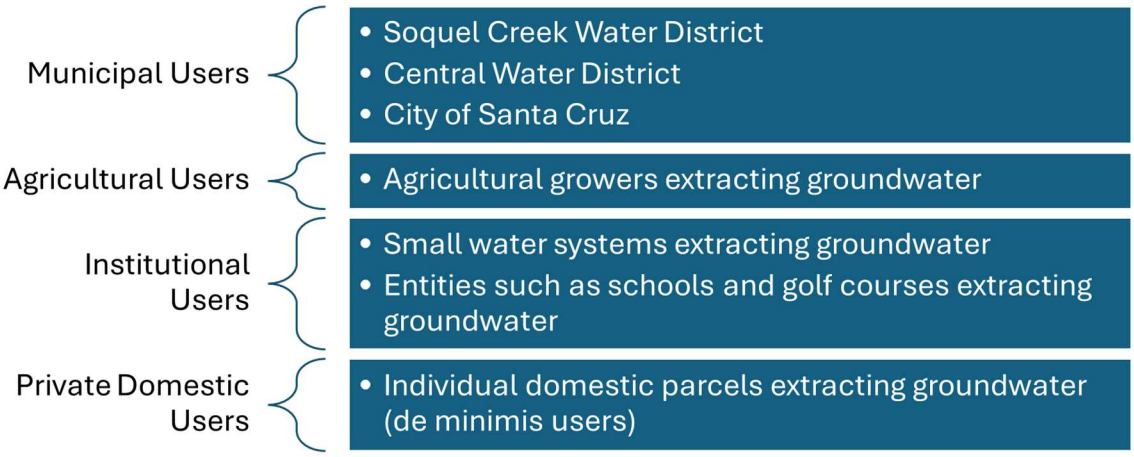
B. Description of Santa Cruz Mid-County Basin Groundwater Users

Groundwater extraction in the Santa Cruz Mid-County Basin is discussed in detail in the GSP and reported annually to DWR as part of MGA's compliance with SGMA. Four distinct types of groundwater users (or user classes) make up the majority of extraction in the Basin: municipal, private domestic, agricultural, and institutional. MGA's annual reports include both measured and modeled estimates of extraction by user class, reflecting the differing levels of metering and data availability among user types.[9]

Understanding these four user classes – and the significance of their extraction through lenses of sustainability, Basin impacts, outreach, and administrative efficiency – is necessary in order to evaluate optimal funding strategies for MGA. This Memorandum explores various ways to account for the benefit provided to these users and the potential impact their pumping has on the Basin. A summary of these four user classes is provided below.

[9] https://www.midcountygroundwater.org/sustainability-program/annual-reports.

Figure 2 - Santa Cruz Mid-County Basin Groundwater Users



Municipal Users

Municipal users represent the largest and most accurately measured category of groundwater extraction in the Basin. This class refers to municipal water systems extracting groundwater and includes pumping by Soquel Creek Water District, Central Water District, and the City of Santa Cruz Water Department – three of the four MGA Member Agencies. The fourth Member Agency (the County of Santa Cruz) does not extract groundwater. These public water suppliers provide potable water to most Basin residents and businesses. Combined, these three water providers serve nearly 30,000 customer accounts in the Basin.

All municipal pumping is directly metered at production wells and reported annually, resulting in high-quality data. Because municipal pumping accounts for an average of approximately 76% of total annual groundwater extraction – concentrated in the coastal portion of the Basin – it contributes to seawater intrusion, which is one of the Basin's key sustainability indictors. For this reason, managing this pumping is a central focus of MGA's sustainability strategy. The relationship between municipal pumping and the cost of managing seawater intrusion is discussed in Section V.

Agricultural Users

Agricultural users include growers who use groundwater for crop and pasture irrigation. These volumes are estimated using MGA's integrated hydrologic model, which calculates irrigation demand based on crop acreage, crop type, and local evapotranspiration rates[10]. Agriculture represents a smaller portion of overall pumping at approximately 7% of average annual extraction.

[10] GSP, APP-53.

Due to the inherent data limitations relating to agricultural groundwater use, the accuracy of agricultural groundwater use estimation is lower than other classes.[11] The SCI Team and MGA staff reviewed crop maps published by DWR and found that aerial photography of many parcels where crop irrigation was identified did not display evidence of current irrigation. This inconsistency casts doubt on the ability to accurately identify parcels where irrigation occurs. Upon further analysis, MGA may find that agricultural groundwater use is much lower than currently estimated. The MGA requires meters on agricultural users that use either over 2 AFY or-5 AFY depending on the location of the property[12]. The County also updated its well ordinance in July 2025 and now requires all properties seeking a well permit that would use more than 2 AFY to install a meter. Since both of these programs have recently begun, it may take a few years for this data to develop. Upon continued implementation of the metering program, local knowledge of agricultural extraction would be more precise.

Institutional and Small Public Water System Users

Institutional users include small public water systems (typically those serving 15–199 connections), State Small Water Systems (5-14 connections), schools, and golf courses that are not served by municipal water but extract groundwater for turf irrigation or domestic purposes.

Where possible, these users report metered extraction data to Santa Cruz County; however, in many cases, volumes are estimated from historical usage or modeled turf irrigation demand. Institutional pumping typically accounts for approximately 5% of total annual Basin extraction and reflects a mix of indoor and outdoor water use.

Private Domestic (De Minimis) Users

Private domestic users include individual well owners located inside and outside of municipal water service areas who rely on non-municipal (privately owned wells) for domestic household and limited landscape use. Because these wells are generally unmetered, their annual extraction volumes are estimated. Usage estimates are based upon the number of private domestic wells and a Water Use Factor (WUF) derived from metered small water systems. This WUF is then applied to the estimated number of private domestic wells. Private domestic use typically accounts for an average of approximately 12% of total annual groundwater extraction, which is estimated in annual reports based on residential population outside of municipal service areas and the average water use of municipal connections in the Basin.

[11] Water Year 2024 Annual Report, 27.
[12] https://www.midcountygroundwater.org/wp-content/uploads/Meter-Policy-with-Map.pdf

Based on a spatial and land use analysis by MGA consultants and the SCI Team, this Memorandum estimates that approximately 1,900 domestic parcels rely on de minimis wells in the Basin. The majority of private domestic extraction takes place inland, away from the coast; however, there are private wells near the coast as well. The GSP discusses the implications of this geographic pattern as a management area, particularly in that inland private domestic use has relatively little influence on seawater intrusion and may have less impact on Basin sustainability; and expressed that management areas not be recommended since overall sustainability goals apply to the entire MGA basin.[13] This is discussed in detail in Section V.

C. Description of MGA Costs

The costs associated with SGMA compliance in the Santa Cruz Mid-County Basin are similar to other GSAs across the State. SGMA requires that GSAs operate as public agencies, which incurs general operational costs. Additionally, funding is required to support monitoring and reporting groundwater conditions.

Many GSAs also incur costs stemming from capital projects, which are often necessary to achieve sustainability. Capital costs are necessary in the Santa Cruz Mid-County Basin – However, all capital project costs are borne by MGA Member Agencies, not MGA itself. MGA's costs stem from SGMA compliance, including agency administration, Basin management, operational support, monitoring, and reporting.

SGMA Compliance Costs

Member Agencies have historically and currently made significant financial contributions to GSP implementation in the Basin. As noted above, current projects are being implemented by Member Agencies, and as such, project costs are incurred by these Agencies. Because current project costs are borne by MGA Member Agencies, not MGA itself, they are not evaluated in this Memorandum.

The primary purpose of this Memorandum is to provide an analysis of options for MGA to recover compliance costs stemming from MGA's obligations under SGMA. In order to conduct this analysis, this Memorandum identifies a projected annual revenue need that is intended to inform the annual SGMA compliance cost that would be funded by Member Agencies alone or by Member Agencies and some combination of Basin groundwater users. MGA budget projections and an estimated annual revenue need are described below.

[13] GSP, 2-203.

Projected MGA Budget

MGA's projected revenue need in the coming years involves consideration of cost projections, other revenue sources, and reserves. A Budget projection for fiscal year ("FY") 2025-26 through FY 2029-30 is shown below in Table 1.

Table 1 - Projected MGA Revenue Needs

	Category	2025-26	2026-27	2027-28	2028-29	2029-30
	Beginning Reserves[A]					
1		$1,408,181	$1,064,191	$1,178,488	$909,149	$535,536
	Revenue[B]					
2	Agency Contributions	$0	**$450,000**	**$500,000**	**$550,000**	**$600,000**
3	Agency Contributions (Grant Administration)	$65,000	$10,000	$0	$0	$0
4	Grant Funds (SGMI)	$546,540	$210,297	$0	$0	$0
5	Interest on Reserves	$30,000	$30,000	$25,000	$15,000	$10,000
6	Total Operating Revenue	$641,540	$700,297	$525,000	$565,000	$610,000
	Operating Expenses[C]					
7	Administration	$180,000	$180,000	$187,200	$194,687	$202,474
8	Legal	$10,000	$12,500	$12,500	$13,500	$15,000
9	Management & Coordination	$268,090	$150,000	$137,800	$143,313	$149,045
10	Monitoring	$226,455	$148,500	$158,040	$164,362	$170,936
11	GSP Reporting	$250,986	$70,000	$272,800	$395,712	$158,740
12	Outreach & Education	$50,000	$25,000	$25,999	$27,039	$28,121
13	Total Operating Expense	$985,531	$586,000	$794,339	$938,613	$724,316
	Ending Reserves[D]					
14		$1,064,191	$1,178,488	$909,149	$535,536	$421,220

Reserve Funds

Agency funding reserves have accumulated over time from prior Member Agency funding contributions as well as DWR grant funding. Grant funds are reimbursed in arrears, so Member Agencies have routinely made annual contributions necessary to fund operational expenses as they are incurred with subsequent grant reimbursements for some activities. Reserves are shown in two places in Table 1 – first, as beginning reserve for each FY, and second, as ending reserves for each FY. Note that the total operating expenses shown above exceed the total revenue in each FY. Despite the projected budget's annual shortfall, financial solvency is achieved by drawing down the reserve fund. By subtracting the annual shortfall (operating expenses (C) minus revenue (B)) from the beginning reserves (A), we calculate the ending reserve (D). The current Board policy on reserves is to maintain 50% of annual expenses; reserves are expected to be drawn down until this amount is reached.

Revenue

As noted previously, MGA's current revenue has largely been generated through Member Agency Contributions and grant funding. Note that aside from contributing to grant administration, Member Agency contributions are not projected for FY 2025-26 – contributions have not been collected in recent years due to the amount of funds held in reserve.

Current grant funding is slated to be fully expended in FY 2026-27, illustrated in Table 1 by the inclusion of grant funding in FY 2025-26 and FY 2026-27, but having no funding in future years (line 4). While MGA will continue to monitor potential grant opportunities stemming from Proposition 4 and other sources, this type of funding is inconsistent, competitive, often not aligned with many compliance activities, and cannot be relied upon prior to acquiring a grant award.

Operating Expenses

MGA's operating expenses stem from SGMA compliance costs – the core costs related to complying with SGMA and administering the groundwater sustainability program. SGMA mandates specific requirements related to monitoring and reporting Basin conditions to DWR. MGA also has general administrative costs associated with running the Agency. More detail on these costs is provided below.

Administration

Administration includes the range of activities required to run the Agency. It covers the day-to-day operations and administrative functions, Board governance support, contractual management of consultants, routine coordination amongst the executive staff of the respective Member Agencies, record keeping and reporting, finance and accounting, and Agency operations.

Legal

Legal expenses refer to the cost of legal counsel and related services supporting MGA's role as a GSA. Legal support is used for review of regulations (such as SGMA requirements), contracts, board governance, compliance matters, and potentially fee establishment efforts.

Management and Coordination

Management and coordination encompass the activities and resources required to coordinate among Member Agencies, stakeholders, and consultants, and to manage the suite of technical, regulatory, and organizational tasks needed for implementation of the GSP. It includes consultant coordination, program management, coordination of monitoring and modeling efforts, board support, and grant reporting.

Monitoring

Monitoring expenses cover data collection, maintenance of monitoring networks, water-level and quality sampling, submission of data to the State, and related technical support. MGA currently operates a monitoring network consisting of 148 wells across the Basin and seven streamflow gages between both Soquel and Aptos Creeks.

GSP Reporting

GSP reporting refers to the required reporting of Basin conditions to DWR. Costs include the preparation, review, and submittal of MGA's annual reports, periodic evaluations, model updates, and other reporting obligations under SGMA. It includes work to compile and analyze data, write reports, upload to the SGMA Portal, and handle administrative tasks related to reporting deadlines.

Outreach and Education

Outreach and education funding supports public engagement, stakeholder involvement, printed and digital communication, workshops, public meetings, and maintaining the Agency's website. These efforts ensure transparency, awareness of groundwater conditions and Agency activities, and the opportunity for input into groundwater management decisions.

Revenue Need

The total revenue need considered in a funding strategy is distinct in that it is related to, yet different from, the budget or total expenses. Other sources of funds – in this case, grant funding and reserve funds – reduce the revenue need that is applied to potential funding mechanisms (e.g., Member Agency contributions or a fee).

To that end, grant funding and reserves must be considered in order to calculate the annual revenue needed to continue MGA's SGMA compliance efforts. Approximately $757,000 in grant funding remains in the budget through FY 2026-27, but no further funds can be assumed in future years. For this reason, FY 2027-28 through FY 2029-30 provide a more accurate picture of MGA's revenue need.

As noted above, reserve funds are drawn down each year in Table 1, reducing the revenue that other sources will need to generate. Once the reserve is drawn down to 50% of annual operating expenses, the annual revenue need will change – but for the next five fiscal years (including FY 2025-26) these reserves will supplement the budget and reduce need for additional revenue.

This Memorandum calculates the annual revenue need in support of MGA's SGMA compliance costs by taking an average of project Member Agency contributions for FY 2026-27 through FY 2029-30. Taking an average of these four amounts from Table 1 (line 2), we calculate a forecasted revenue need of $525,000 per year. This figure represents a baseline need - depending on the funding mechanism selected by MGA, additional costs may be incurred. For example, a continuation of Member Agency contributions through Member Agency payments reflects a strategy that could require virtually no additional expenses, while the implementation of a fee program paid directly by Basin groundwater users could require both one-time implementation costs and annual administration costs. This is discussed in detail in Section V. The baseline revenue need of $525,000 serves as a point of reference for this conceptual analysis.

What Drives MGA Costs?

In addition to the administrative and reporting obligations required under SGMA, MGA's costs are influenced by physical conditions and operational factors within the Basin that shape how resources are managed. These underlying factors are referred to in this memorandum as "cost drivers" – conditions or activities that directly influence the scope and cost of MGA's work. Cost drivers may include both broad regulatory responsibilities that are related to all Basin groundwater use and specific management needs related to particular sustainability indicators.

Cost drivers stem from the collective effects of groundwater use across the Basin. In the Santa Cruz Mid-County Basin, sustainability indicators that drive costs include pumping conditions associated with seawater intrusion, groundwater storage trends within the Aromas and Purisima aquifers, and localized surface water depletion. Considering how these cost drivers are connected to groundwater use can help to inform a more nuanced understanding of MGA costs and how they should be allocated to groundwater users.

While the magnitude of these conditions varies from year to year, each contributes to the overall scale and complexity of MGA's management responsibilities and informs its long-term financial needs. A more detailed discussion of cost drivers and their relationship to groundwater use and Basin management is provided in Section V.

Considering the Cost of Implementing a Fee Program

An important consideration when evaluating the possibility of developing a fee program in the Basin is the additional cost associated with implementing and administering it. Implementing a fee that includes private groundwater users would introduce additional costs beyond MGA's current administrative and programmatic expenses. These costs reflect the work required to identify, document, and maintain a comprehensive database that extends beyond the Member Agencies. Developing a fee program would require technical and administrative tasks such as parcel-level data analysis, integration of groundwater use data, legal review, preparation of a fee study, and coordination with the County Auditor's office for collection.

The one-time implementation cost for such a program is estimated at approximately $70,000 to $90,000, depending on the complexity of the methodology, the extent of outreach, and data refinement needs. These costs would cover consultant services for fee development, public noticing, outreach materials, and the creation of a billing database compatible with County collection systems.

After implementation, ongoing administration would likely require $10,000 to $15,000 annually. This would include updating parcel and ownership information, managing appeals, maintaining billing records, and coordinating with the County or other entities for annual levy processing. The level of effort would depend on the number of payers included and the precision of the groundwater use data used to assign charges.

Amortizing implementation costs over a five-year period, developing a fee program would likely cost an additional $24,000 - $33,000 per year. While these additional costs are modest relative to total MGA expenditures, they would increase fee rates or reduce the net revenue available to support SGMA compliance. Any decision to include private users in a fee program should weigh these administrative costs against the additional revenue and equity benefits such a program would achieve.

III. Funding Mechanism Legal Frameworks

Existing California law provides a relatively finite number of funding frameworks for local public agencies to generate revenue in support of the services they provide. These frameworks include key characteristics that affect their applicability to specific funding needs and strategies, including implementation procedures, proportionality requirements, flexibility of revenue, and administrative efficiency. This Section provides an overview of these characteristics in order to evaluate their applicability in the Santa Cruz Mid-County Basin.

This Memorandum identifies several options as "primary" funding mechanisms and several options as "alternative" funding mechanisms. This designation stems from the applicability of each framework within the context of the Santa Cruz Mid-County Basin.

Primary Legal Frameworks

A. Member Agency funding.
B. Water Code § 10730 Fees (often interpreted as regulatory fees under Proposition 26).
C. Water Code § 10730.2 Fees (often interpreted as property related fees under Proposition 218).

Alternative Legal Frameworks

D. Special Taxes.
E. Benefit assessments (under Proposition 218).
F. Development impact fees (under the Mitigation Fee Act).

A. Member Agency Funding

Through the first ten years of SGMA, Member Agency funding (or "self-funding") has been utilized by numerous GSAs across the State – particularly during GSP development. However, in recent years, a number of GSAs have moved away from this model for various reasons. These include an inability of member agencies to continue to contribute long-term funding, a desire to involve all groundwater users in the funding framework, or an increase in GSP implementation costs.

Member Agency funding has several characteristics that continue to make it a practical option in some settings:

- Administrative Simplicity: It requires no additional implementation procedures or outreach.
- Regulatory Flexibility: Proportionality requirements under Propositions 26 and 218 do not apply.
- Lower administrative costs: It involves minimal implementation and administrative expense.

- Established use: GSAs that already employ Member Agency funding arrangements may use this option as a familiar and established approach.

While this Memorandum provides an analysis of options such as fees, assessments, and taxes, it acknowledges Member Agency funding as one of several viable approaches to meeting MGA's SGMA-related compliance costs.

Applicability to MGA

Member Agency funding (along with grant funds) has provided MGA with revenue that has been more than adequate to maintain SGMA compliance to date. For this reason, it continues to be a viable option. The question of whether to revisit the basis of cost-sharing could be considered in a number of different ways. Section V of this Memorandum illustrates several potential options. Consideration of equity, cost drivers, and Basin impacts would be key elements of restructuring the basis of MGA's Member Agency cost-sharing.

Table 2 below summarizes some of the key considerations of Member Agency funding for MGA, listed as challenges and advantages.

Table 2 - Member Agency Funding Considerations

Challenges	Advantages
▪ Does not directly account for private groundwater users. ▪ Accounting for private domestic users relies on the County, which does not receive direct revenue from that user class. ▪ Any cost-share restructuring would require agreement from Member Agencies.	▪ Simplest implementation procedure. ▪ Most cost-efficient funding framework. ▪ Most administratively efficient funding framework.

Note Regarding § 10730 and § 10730.2 – Fee Constitutionality

Within SGMA, two funding frameworks are specifically described for use by GSAs: Water Code § 10730 is aimed at general GSA management and GSP implementation excluding major capital investments for improvements and requires streamlined implementation procedures. Water Code § 10730.2 is aimed at the full spectrum of GSA costs including major capital investments and facility operations and requires more rigorous and lengthy adoption procedures.

An essential aspect of understanding the legal requirements of fee programs in support of groundwater management is the way in which various legal obligations interplay with one another. These specific sections of the California Water Code provide GSAs the authority to establish fees, but all charges imposed by government agencies must adhere to the requirements set forth in the California Constitution.

Water Code § 10730 and § 10730.2 are the legal apparatus by which GSAs can charge fees. These code sections detail specific requirements related to fee structure and implementation. The descriptions of fees in each of these two sections provide guidance for the constitutional "pathways" that are likely applicable for their respective fee types. While these code sections do not explicitly state that the fees they describe are regulatory fees (§ 10730) or property related fees (§ 10730.2), they are often interpreted as such due to shared characteristics between their descriptions. However, recent case law indicates that § 10730.2 fees may need to comply with Proposition 26 ("Prop 26") proportionality requirements as well as Proposition 218 (Prop 218") property related fee implementation procedures.[14]

B. Water Code § 10730 Fees (Regulatory Fees)

Many GSAs across California fund administrative, regulatory, and SGMA compliance activities using regulatory fees authorized under Water Code § 10730. These fees provide a streamlined means to recover costs for plan implementation, monitoring, and reporting. Of the 32 GSAs analysis by SCI and MGA, 14 (or 44%) of them utilized § 10730 regulatory fees (see Appendix A for more information).

Legal Framework – Proposition 26

Water Code § 10730 aligns constitutionally with the regulatory fee provisions of Proposition 26. Prop 26 defines a tax as "any levy, charge, or exaction of any kind imposed by a local government," except under specific exceptions. Regulatory fees are exempt from the requirements of a tax (including two-thirds support from registered voters) if they meet one or more of these exceptions. The two most pertinent exceptions are listed below:

- The charge confers a specific benefit or privilege to the payer not provided to others, and the charge does not exceed the cost of conferring that benefit or privilege.
- The charge funds a specific service or product provided directly to the payer not provided to others and does not exceed the cost of providing that service or product.

[14] https://www.courts.ca.gov/opinions/archive/B312471.DOC where Proposition 26 was found to be the appropriate constitutional framework for evaluating groundwater extraction charge proportionality.

Proposition 26 places the burden of proof on the agency to demonstrate that the fee is not a tax, that revenues do not exceed the reasonable cost of the governmental activity, and that costs are allocated in fair proportion to the payer's burdens or benefits.

Implementation Procedures

Regulatory fees under § 10730 are relatively easy to adopt. A fee study serves as the legal basis for the fee's proportionality. No mailed notice or ballot is required; however, the agency must:

- Complete and post a fee study establishing cost and proportionality.
- Publish notice of a public meeting at least 20 days prior.
- Hold the public meeting to present the study and supporting data.
- Adopt the fee by ordinance or resolution.

Relative to other fees, assessment, and taxes, regulatory fee implementation is relatively inexpensive. Fees may also be collected through the County tax roll, similar to property taxes, reducing administrative effort.

Proportionality Requirements

To meet the requirements of Prop 26, the fee study must demonstrate that:

- The amount is not more than necessary to cover the reasonable cost of the governmental activity; and
- The way those costs are allocated to a payor bears a fair or reasonable relationship to the payor's burden on, or benefits received from, the governmental activity.
- The governmental activity funded by the fee is not provided to those not charged.

De Minimis Users

Water Code § 10730 introduces an additional requirement regarding fees imposed on de minimis extractors (those pumping two acre-feet or less annually for domestic purposes):"A groundwater sustainability agency shall not impose a fee pursuant to this subdivision on a de minimis extractor unless the agency has regulated the users pursuant to this part." Interpretation of what constitutes "regulation" varies, but most GSAs consider implementation of a GSP sufficient. Some agencies strengthen this rationale by requiring registration of de minimis wells or adopting resolutions confirming oversight.

For MGA, determining whether to include or exclude private domestic users will depend on how benefit and proportionality are defined. Excluding these users may be justified if the funded activities do not provide a measurable benefit, but such justification must be clearly documented. Under Proposition 26, the governmental activity funded by the fee is "not provided to those not charged."

Flexibility of Revenue

Fees under § 10730 may be used to fund the cost of:

- Preparation, adoption, and amendment of a groundwater sustainability plan
- Investigations, inspections, compliance assistance, enforcement
- Program administration
- A prudent reserve

These fees cannot fund capital costs, but they align closely with MGA's needs, which are primarily administrative and compliance-related and fall under the term "program administration."

Implementation Cost and Administration

Relative to the other funding mechanisms described below, regulatory fees under § 10730 are less expensive to implement. The primary costs stem from the fee study and additional outreach. Ongoing administration is also limited; if collected on the County tax roll, the Santa Cruz County Auditor's Office charges a nominal processing fee of 1% of total revenue.

Applicability to MGA

A § 10730 fee structure could provide MGA with a stable and defensible funding source for ongoing SGMA compliance. Because MGA's expenditures relate primarily to program administration, this mechanism is a strong fit.

The absence of a mailed ballot or protest hearing reduces implementation cost but also limits opportunities for structured public participation. Given that MGA has never directly charged private groundwater users, (domestic, small water systems, institutional or agricultural users), additional outreach would be essential to build understanding and acceptance.

One additional consideration relates to the logistics of imposing a fee on private groundwater users. MGA has never charged private users directly, meaning extensive outreach would be required to explain the fee's purpose, proportionality, and benefits. Furthermore, because much of the private groundwater use in the Basin is estimated, extensive work would be required to determine parcel-scale fee calculations. MGA should evaluate the costs associated with imposing a fee on private groundwater users within the context of the amount of private pumping that occurs in the Basin (and the revenue it would generate).

Table 3 – Water Code § 10730 Fee Considerations

Challenges	Advantages
▪ A detailed fee study would be required. ▪ Additional outreach would be required. ▪ Adoption does not provide as much opportunity for community input. ▪ Charging private groundwater users would incur additional costs – and a fee charged to these users would generate limited revenue relative to other basins.	▪ Quick and inexpensive to adopt. No balloting or protest hearing is required. ▪ Use of funds aligns with MGA revenue needs.

C. Water Code § 10730.2 Fees (Property Related Fees)

Water Code § 10730.2 authorizes GSAs to levy fees consistent with Proposition 218 property related fees, which are codified in Article XIII D, Section 6 of the California Constitution. These fees can fund both administrative and capital costs, subject to specific procedural and proportionality requirements. Of the 32 GSAs analyzed by SCI and MGA, 15 (or 47%) of them used § 10730.2 property related fees (see Appendix A for more information).

Legal Framework – Proposition 218

Section 10730.2 incorporates the implementation procedures of Proposition 218, which governs property related fees. Under Proposition 26, "assessments and property-related fees imposed in accordance with Article XIII D" are exempt from the definition of a tax, establishing this mechanism's independent legal framework.

Property-related fees are charges imposed "as an incident of property ownership" based on services provided to the payer. The amount of the fee must reflect the reasonable cost of providing the service.

Implementation Procedures

Section 10730.2 directs GSAs to follow subdivisions (a) and (b) of Article XIII D, Section 6, which require a mailed notice and protest hearing. The balloting requirement in subdivision (c) does not apply to water-related fees, confirming that GSA fees are subject to a "majority protest" process rather than a mailed balloting.

Water Code § 10730.2 fee implementation procedures are listed below:

- Prepare a fee study establishing cost and proportionality.
- Mail notice to all affected property owners at least 45 days before a public hearing.
- Conduct the hearing, tabulate written protests, and determine if a majority protest (over 50% of affected parcels) exists.

- If no majority protest occurs, adopt the fee by ordinance or resolution.

Water Code § 10730.2 authorizes these fees to be charged on the basis of extraction. While extraction-based methodologies are specifically authorized, this section does not explicitly bar alternative or hybrid approaches from being used.

Property related fee implementation (Prop 218), while less expensive than some options, is more costly than imposing a regulatory fee (Prop 26). Costs include development of a fee study, mailed noticing to all affected property owners, and holding a public hearing.

Proportionality Requirements

To comply with Proposition 218, a fee study must demonstrate that:

- Revenues do not exceed the funds required to provide the property-related service.
- Revenues are used only for their intended purpose.
- Each parcel's charge reflects the proportional cost of the service attributable to it.
- No charge is imposed for services not actually used by, or immediately available to, the property.

De Minimis Users

No additional requirements apply specifically to de minimis users under § 10730.2. However, Proposition 218's proportionality requirements dictate that any service provided to de minimis users must be funded by them directly or covered by other sources. As with § 10730 fees, GSAs must evaluate whether these users receive measurable service from the funded activities before deciding whether to include them.

Flexibility of Revenue

Property-related fees provide broader spending flexibility than regulatory fees. Eligible uses include:

- Administration, operation, and maintenance, including a prudent reserve.
- Acquisition of lands or other property, facilities, and services.
- Supply, production, treatment, or distribution of water.
- Other activities necessary or convenient to implement the plan.

Because MGA's current costs are primarily administrative, this additional flexibility may offer limited advantage, though it would allow coverage of future project-related costs if needed.

Implementation Cost and Administration

Implementation costs are higher than those for regulatory fees due to the required mailing but remain lower than for other revenue mechanisms such as assessments or special taxes.

Many GSAs use County tax bills to collect fees under § 10730.2, which is generally recommended as it reduces administrative burden. As noted previously, the Santa Cruz County Auditor's office collects a fee of 1% of the total charge placed on tax bills.

Applicability to MGA

While Water Code § 10730.2 and Proposition 218 provide a defensible legal framework, this option introduces greater procedural and political complexity than other mechanisms. The mailed notice and protest hearing process offers transparency and public input but also carries the risk of opposition halting implementation through a majority protest.

Given that MGA has never charged private groundwater users directly, extensive outreach would be required to explain the fee's purpose, proportionality, and benefits. Furthermore, because much of the private groundwater use in the Basin is estimated, extensive work would be required to determine parcel-scale fee calculations. MGA should evaluate the costs associated with imposing a fee on private groundwater users within the context of the amount of private pumping that occurs in the Basin (and the revenue it would generate).

Table 4 – Water Code § 10730.2 Fee Considerations

Challenges	Advantages
▪ A detailed fee study would be required. ▪ Politically challenging. Although balloting is not required, property owners may be able to attain a majority protest, preventing the fee program from being implemented. ▪ Charging private groundwater users could prove difficult – and a fee charged to these users would only generate xx% of MGA revenue.	▪ City of SC, SqCWD, and CWD perform a detailed fee study that is contained within their respective detailed fee studies under Prop 218. ▪ Revenue generation is appropriate to fund all aspects of GSP implementation costs (administrative and capital). ▪ Cost of implementation is relatively low compared to other mechanisms that can fund capital projects. ▪ Protest hearing provides opportunity for extensive community input.

D. Special Taxes

Special taxes are voter-approved charges requiring a two-thirds majority for adoption. While well known in California, they are rarely used for groundwater management (as of 2025, no GSA has implemented one). Nonetheless, because they do not follow the same proportionality requirements as fees, they represent the most effective legal framework for spreading costs across an entire basin. Parcel based taxes (as opposed to sales taxes, etc.) are the most viable type of special tax for funding water-related activities. As such, discussion of special taxes in this Memorandum will focus on parcel taxes. Of the 32 GSAs analyzed by SCI and MGA, none of them utilized special taxes. SCI is not aware of any GSA that has implemented a special tax to date (see Appendix A for more information).

Legal Framework

Special taxes are governed by Article XIII C of the California Constitution and implementing statutes in the Government Code. They differ from fees and assessments in that they must be approved by registered voters rather than property owners. Once approved, special taxes are highly durable and rarely face successful legal challenges. The term "special" refers to the purpose of the tax. Funds from a special tax are used for a specific purpose (e.g., groundwater management), while funds from a general tax are placed in a general fund.

Special taxes are authorized under Article XIII C of the California Constitution and related Government Code provisions. Unlike fees and assessments, they must be approved by registered voters rather than property owners. A "special" tax dedicates revenue to a specific purpose (such as groundwater management) rather than a general fund.

Implementation Procedures

To place a measure on the ballot, a GSA must coordinate with the County Elections Department regarding timing and cost. Elections occur only on statutory dates (typically in June or November).

Typical steps include:

- Adopt a resolution specifying the tax rate, purpose, and election date.
- Submit measure text to the Registrar of Voters, including a concise ballot question (≤75 words), full text (≤300 words), and impartial analysis.
- Conduct public outreach to inform voters.
- File annual reports following implementation.

Proportionality Requirements

Special taxes are not subject to the proportionality requirements that govern fees or assessments. However, rates cannot be ad valorem (based on property value). Rates are typically uniform across parcels, though unimproved parcels may be charged differently. While this structure simplifies administration, it provides limited correlation to groundwater use and may be viewed as less equitable.

Flexibility of Revenue

Revenue generated through a special tax may fund virtually any GSA activity, including administrative, operational, and capital costs.

Implementation Cost and Administration

The cost of placing a measure on the ballot can vary greatly; however, it is often far more expensive than implementing a fee or assessment. Costs include ballot preparation, election coordination with the County, and public information efforts. These expenses are incurred regardless of whether the measure passes.

Once approved, taxes can be collected on County property bills, requiring only periodic updates to the parcel database and annual reporting.

Applicability to MGA

Although a special tax could provide substantial and stable revenue, the political and procedural challenges are significant. Securing a two-thirds voter majority is difficult, and the process typically spans one to two years. Election costs are nonrefundable if the measure fails.

For MGA, which has not previously levied charges on private users, this pathway would require extensive public education and strong regional support. While it could spread costs across all Basin parcels and lessen the burden on groundwater users, its feasibility is far lower than fee-based options.

Table 5 - Special Tax Considerations

Challenges	Advantages
▪ Requires two-thirds voter approval. ▪ High implementation cost; funds lost if measure fails. ▪ Extensive process. Placing a measure on the ballot would likely take 1-2 years. ▪ A parcel-based special tax would not achieve the same proportionality as a fee based on groundwater use. ▪ **To date, no GSA has implemented a special tax.**	▪ Can fund administrative and capital costs. ▪ Well known. Most property owners are aware and comfortable with (but not necessarily supportive of) the special tax process. ▪ Special taxes provide an opportunity to spread costs across the entire Basin.

E. Benefit Assessments

Benefit assessments, authorized under Proposition 218, allow agencies to charge property owners based on the special benefit conferred to each parcel. They are commonly used in California to fund local improvement districts, such as fire protection, mosquito abatement, and reclamation districts. In recent years, they have been used somewhat commonly by GSAs to fund GSP implementation. Of the 32 GSAs analyzed by SCI and MGA, three (or 9%) of them utilized benefit assessments (see Appendix A for more information).

Legal Framework – Proposition 218

Assessments are governed by Article XIII D, Section 4 of the California Constitution. To be valid, they must fund improvements or services that provide a "special" benefit to assessed parcels beyond "general" benefit. Each parcel's charge must be proportional to this special benefit.

Implementation Procedures

Benefit assessments require an all-mail weighted property owner balloting (not a voter election), and a simple majority (50%) of weighted votes is required for approval. Voting is weighted by assessment amount, meaning the greater assessment placed on a property the more voting power it has (this can be described as $1 = 1 vote). To be adopted, 50% support of submitted ballots must be *achieved* (instead of 50% protest *avoided*).

Benefit assessment implementation procedures are listed below:

- Prepare an Engineer's Report defining the proportional special benefit for each parcel.
- Mail notices and ballots to all affected property owners at least 45 days before a public hearing.
- Hold a hearing to tabulate ballots and consider protests.
- Adopt the assessment by resolution if approved by a majority of weighted votes.

Proportionality Requirements

Benefit assessments are subject to the strictest proportionality standards of all revenue mechanisms. The Engineer's Report must demonstrate that:

- Each parcel receives a specific, quantifiable special benefit.
- The charge reflects the proportional cost of that benefit.
- Any general benefits are identified and funded from non-assessment sources.

Flexibility of Revenue

Assessment revenues can support a range of activities, including administrative and capital costs, provided those expenditures correspond to the benefits identified in the Engineer's Report.

Implementation Cost and Administration

The costs of establishing a benefit assessment include preparing the Engineer's Report and conducting the mailed balloting. Costs are generally higher than for regulatory or property-related fees but lower than for a special tax election. Assessments are commonly collected through the County tax roll.

Applicability to MGA

While a benefit assessment could theoretically fund all aspects of GSP implementation, its strict proportionality and technical documentation requirements make it a challenging choice. Quantifying special benefits from MGA's SGMA compliance costs would require substantial technical analysis and could be subject to legal scrutiny. For MGA, which currently primarily funds general administrative and monitoring activities, this mechanism would be difficult to justify. Moreover, the cost and time to develop an Engineer's Report and conduct the all-mail election may outweigh the modest revenue potential derived from private groundwater users.

Table 6 - Benefit Assessment Considerations

Challenges	Advantages
▪ Difficult to quantify proportionality and special / general benefit. ▪ The 50% majority threshold for approval, while less than the two-thirds required by special taxes, may still be challenging. ▪ Unfamiliar process. Many property owners may not be aware of the process and requirements of an all-mail assessment balloting.	▪ All-mail balloting is often less expensive than balloting at the polls. ▪ Flexible revenue. Funds generated by a benefit assessment can be used to support both administrative and capital costs.

F. Development Impact Fees

Development impact fees are one-time charges imposed on new development to fund public facilities and infrastructure needed to accommodate growth. This Memorandum does not identify any examples of GSAs using development impact fees. In part, this is because such fees are generally limited to infrastructure improvements rather than administrative or regulatory functions. Of the 32 GSAs analyzed by SCI and MGA, none of them utilized development impact fees. SCI is not aware of any GSA that has implemented development impact fees to fund GSP implementation (see Appendix A for more information).

Legal Framework – Mitigation Fee Act

Development impact fees are governed by the Mitigation Fee Act (commencing with Government Code § 66000). The Act authorizes local agencies to impose fees on new development to fund public facilities required by that growth. Funds must be used to expand or construct facilities needed to serve new development and cannot be used to remedy existing deficiencies.

MGA likely does not have independent authority to impose development impact fees. Such authority rests with land-use jurisdictions, meaning any fee related to Basin management would need to be imposed by the County of Santa Cruz (or the City of Santa Cruz or City of Capitola, within its jurisdiction) in coordination with MGA.

Implementation Procedures

Implementation of a development impact fee generally involves:

- Preparing a nexus study demonstrating the reasonable relationship between new development and the need for additional facilities.
- Identifying eligible facilities within a Capital Improvement Plan.
- Establishing fee rates proportionate to each type of new development.
- Adopting the fee by ordinance following a public hearing.
- Accounting for collected funds in separate capital facility accounts.

For MGA, implementation would require coordination with the County to establish an appropriate nexus to groundwater management – such as increased monitoring, data collection, or infrastructure improvements tied to new wells or development. Because MGA does not issue land-use entitlements, it would depend on the County to administer the fee program.

Proportionality Requirements

The Mitigation Fee Act requires that a nexus be established between the amount of the fee and the need for new facilities created by new development. Revenues generated through development impact fees must fund capital improvements or facility expansions made necessary by new development. Funds may not be used for existing deficiencies or prior system shortfalls, Routine operations, maintenance, or administration. This restriction limits the relevance of development impact fees to MGA's ongoing SGMA compliance responsibilities, which are largely administrative and not necessarily driven by development.

Flexibility of Revenue

While development impact fees can fund a wide variety of public facilities, their use is limited to growth-related capital improvements. They cannot fund general regulatory or programmatic costs. Accordingly, their application to groundwater management would be narrow – potentially limited to well construction review, recharge infrastructure, or water-supply reliability projects linked directly to new development.

Implementation Cost and Administration

The cost to implement a development impact fee is moderate and includes preparation of a nexus study, a capital improvement plan, and the necessary public hearing process. Once adopted, the fee is collected by the County (or city) when building permits are issued and deposited into dedicated accounts for eligible projects. MGA would require an interagency agreement for enforcement and collection.

Applicability to MGA

While development impact fees provide a clear mechanism for funding growth-related capital improvements, their relevance to MGA is limited. MGA's primary costs (administration, monitoring, and compliance) are not eligible to be funded by such fees. Moreover, the Agency does not have authority under the Mitigation Fee Act to impose such fees directly. A coordinated program with the County could theoretically fund groundwater infrastructure tied to future development, but this approach would require complex interagency agreements and would not address ongoing SGMA compliance needs.

Table 7 - Development Impact Fee Considerations

Challenges	Advantages
▪ MGA lacks statutory authority to impose or collect the fee. ▪ Limited applicability to administrative or regulatory activities. ▪ Would require County participation and complex coordination. ▪ Cannot address existing deficiencies or ongoing SGMA costs.	▪ Cost of implementation is low relative to other mechanisms. ▪ One-time charges minimize ongoing administrative effort. ▪ Could account for the burden of new development on groundwater management.

IV. Funding Mechanism Methodology

Introduction

Funding mechanism methodology is the basis by which beneficiaries are charged a fee, tax, or assessment. The methodology and associated proportionality of a funding mechanism are key aspects of its character and hold implications for its implementation, annual administration, and corresponding outreach.

A funding program's rate is determined by a simple equation, but the work that goes into developing the inputs to this equation can be quite complex. The rate determines how costs are distributed among payers and whether the program generates adequate, proportional, and legally defensible revenue. In its simplest form, the rate is calculated by dividing the total revenue requirement by the methodological unit (such as AF extracted, irrigated acres, or number of parcels).

The primary methodologies commonly used by GSAs in California include charges based on extraction (volumetric methodology), charges based on parcels or acreage (land-based methodology), and charges based on size and crop type on a parcel (irrigated acreage methodology). Combinations of these methodologies are sometimes used together as a part of a larger fee program that employs multiple approaches (hybrid methodology). Each of these is discussed further below.

A key consideration of methodology is the spectrum of "granularity" or the appropriate level of precision. A more granular methodology presents a double-edged sword. The more granular the methodology, the more accurately proportional the funding mechanism will be. However, granularity also introduces more opportunities for argument, challenges, or appeals. MGA should evaluate where on this spectrum is the appropriate balance for the Basin.

A. Volumetric Methodology

A volumetric methodology bases charges on the quantity of groundwater extracted or consumed, expressed in acre-feet (AF). This approach is used by a number of GSAs across the State – but the means of calculating groundwater use volumes varies greatly. Of the 32 GSAs analyzed by SCI and MGA, 12 (or 38%) of them used a stand-alone volumetric methodology with no other charge types, while additional five GSAs employed a volumetric charge as a part of a hybrid methodology (see Appendix A for more information).

Payer Pool

This approach can encompass all groundwater users in the Basin – or a subset of users. Municipal and small public water systems already report annual extractions to the State Water Resources Control Board, making them the most straightforward to include. Other institutional, agricultural, and residential private groundwater users could be incorporated through estimated or modeled use data.

Development of Methodology

Volumetric methods are often considered the most proportional because they directly relate charges to the amount of groundwater used. However, their accuracy depends on data availability, and don't necessarily correlate to impacts. While most groundwater use in the Basin is municipal and can be accounted for, most individual private groundwater users in the Basin lack meters or readily available extraction data. If a volumetric approach to Member Agency funding is used, this would be quite straightforward; if private users are included, it would be more complex.

To address this gap, extraction could be quantified if private users have well data; otherwise estimated use could be calculated using parcel characteristics, crop type, land use data, or regional evapotranspiration models. For agricultural parcels, applied or consumptive water use values by crop type could be used to estimate typical extraction rates. For residential users, estimates could be developed using public water system consumption data adjusted for parcels on private wells.

One additional challenge related to the Santa Cruz Mid-County Basin is the relatively small amount of crop acreage and an inability to consistently identify crop irrigation on a parcel scale. While DWR publishes annual crop maps that identify crop type and acreage on parcels across the State, this data is notably inconsistent in the Santa Cruz Mid-County Basin. The SCI team and MGA staff reviewed aerial photography overlayed with crop maps, finding that many parcels where crops were assigned by the maps no longer had evidence of active irrigation. Further complicating this approach is the question of whether crops are dry farmed, particularly in wet years.

The inherent challenge lies in accurately quantifying extraction or consumption at the *parcel* scale – while most estimation methods and model data are focused on a *Basin-wide* scale. Variability will always occur, making any Basin-wide volumetric charge difficult to implement.

Given these complexities, any volumetric approach that includes private users would require careful documentation of estimation methods and assumptions, along with a transparent process for data validation and appeal.

Administrative Efficiency

Administering a volumetric methodology requires significant data management and annual updates. Key datasets, such as crop maps, parcel boundaries, and public water system service areas must be maintained and periodically validated. Updating these data to reflect new wells, retired parcels, or changing land uses would require ongoing coordination with the County and other agencies. It is also worth noting that with changes in annual groundwater use, fluctuations in revenue could occur, leaving the possibility that funding may be less stable under a fee program.

Overall, volumetric methodologies are more complex to develop and maintain than parcel-based or acreage-based methods. However, they are often the most defensible from a proportionality standpoint, as they link cost recovery directly to groundwater use quantities.

Applicability to MGA

A volumetric methodology applied only to MGA Member Agencies (which roughly produced the current cost-share split) could be quite effective. However, applied to all Basin users, implementation would be constrained by limited data.

In evaluating the advantages and challenges of this type of methodology, MGA should consider the degree of granularity that is not only possible but also appropriate for the Basin. For private groundwater users, data limitations and the corresponding assumptions necessary to formulate an approach introduce the possibility that discrepancies at the parcel scale may occur. For this reason, methodology based on estimation requires a thorough approach that vets the supporting data, as well as the assumptions this data supports.

Given MGA's relatively small proportion of agricultural pumping and the predominance of municipal reporting, volumetric methods may offer only marginal gains in proportionality relative to their complexity. Still, as data quality improves through ongoing reporting and monitoring, a volumetric approach could serve as a long-term goal or refinement of a simpler initial methodology.

Table 8 - Volumetric Considerations

Challenges	Advantages
▪ Requires multiple datasets; availability of updated data varies with each type. ▪ Annual administration requires comprehensive updates. ▪ More granularity provides more likelihood of appeals and challenges to estimates. ▪ Potential fluctuation in annual revenue.	▪ Can account for all groundwater users; works especially well for metered users. ▪ Could inform (by meters or estimations) a Member Agency funding structure. ▪ Highly proportional when calculated accurately.

B. Land-Based Methodology

A land-based methodology allocates costs based on parcels or land area. This can take the form of a flat parcel charge, a charge per acre, or a combination of both. The approach provides a straightforward means of distributing Basin-wide costs and is commonly used by agencies seeking stable, easily administered funding. However, because these charges are not tied directly to groundwater use, proportionality must be carefully considered. Of the 32 GSAs analyzed by SCI and MGA, nine (or 28%) of them used a stand-alone land-based methodology with no other charge types, while additional four GSAs employed a volumetric charge as a part of a hybrid methodology (see Appendix A for more information).

If implementing a fee under § 10730 or § 10730.2, it is imperative to establish that a land-based charge would be compliant with Proposition 26 or 218. A land-based rate that does not fluctuate based on water use would require definitively establishing a relationship to the cost recovered.

Payer Pool

A land-based charge could apply to all parcels that rely on groundwater. For MGA, this could include municipal, agricultural, institutional, and rural residential parcels. Public water systems could be treated as individual payers similar to municipal systems under MGA's current self-funding agreement, covering the parcels they serve. Alternatively, their share of costs could be allocated directly to the parcels they serve.

There are examples of a GSA applying land-based charges to all parcels within their jurisdiction, regardless of whether they use groundwater. However, this approach would require careful consideration of fee proportionately requirements and would likely introduce a degree of risk. Generally, applying charges only to groundwater users is more legally defensible.

Development of Methodology

Land-based methodologies are simple to develop using parcel data from the County Assessor, which already includes parcel size, use codes, and ownership information. Charges may be uniform across all parcels (a flat rate), scaled by acreage, or tiered by land use category.

If desired, rates could vary by land use type or acreage – applying, for example, a higher rate to irrigated or developed parcels and a lower rate to undeveloped or non-irrigated parcels. This allows limited differentiation among users while maintaining administrative simplicity.

Because this method does not rely on metered extraction data, it avoids many of the data limitations associated with volumetric methodologies. However, it also provides less direct proportionality to groundwater use. Under a fee program, MGA would have to clearly demonstrate that parcels charged receive a proportional benefit from MGA's groundwater management activities or services.

A hybrid approach could also be considered. For instance, MGA could apply a small, uniform land-based charge to all groundwater-using parcels to fund administrative and monitoring costs, while Member Agency contributions or volumetric fees address use-based costs. This structure would provide both broad cost-sharing and proportionality where appropriate. This is discussed in detail in Section IV D.

Administrative Efficiency

Land-based methods are highly efficient to administer. Parcel and acreage data are stable, well-maintained, and updated annually by the County Assessor's office. Once the charge is established, ongoing administration would primarily involve routine updates for parcel changes and coordination with the County Auditor for collection, if placed on the tax roll. Because parcel characteristics change infrequently, annual adjustments are minimal, and the risk of revenue fluctuation is low.

Applicability to MGA

Given the Basin's limited private pumping relative to many basins and the concentration of pumping among Member Agencies, a land-based charge could serve as a practical near-term solution or as a complement to other methodologies. To this end, the use of a land-based charge as a part of a hybrid methodology may be a more effective approach. This is discussed in detail in Section IV D below.

Given limited private pumping and the concentration of extraction among Member Agencies, a land-based charge could provide consistent funding for Basin-wide management activities and account for benefit provided to small private users. Its simplicity and predictability make it a good candidate for use within a hybrid funding model (see Section IV D).

Table 9 - Land-Based Considerations

Challenges	Advantages
▪ Not proportional to actual groundwater use (as a stand-alone approach). ▪ Requires clear demonstration of benefit provided to ensure legal defensibility (if informing a fee). ▪ Annual administration requires comprehensive updates. ▪ Provides limited differentiation among user types.	▪ Can account for all groundwater users. ▪ Simple and inexpensive to develop and administer. ▪ Stable and predictable annual revenue. ▪ Could inform (at least in part) a Member Agency funding structure. ▪ Administratively efficient; supported by existing County parcel data.

C. Irrigated Acreage Methodology

An irrigated acreage methodology allocates costs based on the number of irrigated acres on a parcel, using assumed crop irrigation requirements as a proxy for groundwater use. This approach is common in basins where agriculture represents the majority or a large portion of groundwater demand. It is simpler than volumetric methodologies, but its effectiveness depends heavily on the accuracy of crop-mapping data and the presence of substantial irrigated land within the Basin. In the case of MGA, this could preclude its efficacy. Of the 32 GSAs analyzed by SCI and MGA, one of them used a stand-alone irrigated acreage methodology with no other charge types, while additional five GSAs employed an irrigated acreage charge as a part of a hybrid methodology (see Appendix A for more information).

Payer Pool

This approach typically applies only to parcels with irrigated acreage and is therefore limited to agricultural users. In the Santa Cruz Mid-County Basin, where irrigated agriculture represents a small share of total groundwater extraction, the potential payer pool is limited. Non-agricultural users, such as municipal, institutional, or domestic well owners, would require a supplemental methodology.

Development of Methodology

An irrigated acreage methodology typically relies on geospatial datasets to identify crop type and extent. DWR's annual crop-mapping data serves as a starting point but is known to be inconsistent in the Santa Cruz Mid-County Basin. Review by MGA staff and the SCI team found that many parcels mapped as irrigated showed no evidence of active irrigation. Additionally, crops in the Mid-County Basin may be dry farmed – leading to questions about equity. These inconsistencies make it difficult to accurately determine irrigated acreage at the parcel scale.

Administrative Efficiency

An irrigated acreage program would be relatively efficient to administer once established. Crop-mapping updates and periodic land-use reviews would represent the primary annual tasks. Compared to volumetric or estimation-based methodologies, administrative costs would be lower, and annual revenue would be relatively stable. However, data validation and field verification may still be needed to maintain defensibility, given the inconsistencies in available crop mapping and changes in agricultural practices over time.

Applicability to MGA

Because irrigated agriculture in the Santa Cruz Mid-County Basin is limited, this methodology would generate relatively little revenue. Its narrow payer pool and data challenges likely make it an impractical approach for MGA. While it is effective in groundwater basins with large agricultural operations, the Santa Cruz Mid-County Basin does not support the level of agriculture needed for this methodology to be viable.

Table 10 - Irrigated Acreage Considerations

Challenges	Advantages
▪ Limited irrigated acreage reduces potential revenue. ▪ DWR crop-mapping data inconsistent at parcel scale. ▪ Excludes non-agricultural users without supplemental methodology. ▪ Provides limited differentiation among user types.	▪ Relatively efficient and inexpensive to administer once established. ▪ Relatively stable annual revenue.

D. Hybrid Methodology

A hybrid methodology combines two or more charge types to balance proportionality, administrative efficiency, and fairness among groundwater users. For MGA, a hybrid structure could integrate a land-based component to recover some degree of costs, while a volumetric component could recover remaining costs. Of the 32 GSAs analyzed by SCI and MGA, 10 of them used a hybrid methodology with multiple charge types. These include irrigated acreage / acreage, volumetric / acreage, and volumetric / irrigated acreage / parcels (see Appendix A for more information).

Payer Pool

A hybrid methodology is flexible in that it could encompass all user categories within the Basin, or only a subset of users. The land-based portion could apply broadly to all parcels using groundwater, accounting for the benefit from MGA's groundwater management activities. The volumetric portion could apply only to significant groundwater extractors, such as Member Agencies or large agricultural users with measurable pumping data.

Alternatively, a hybrid methodology could be applied to a self-funding structure, in which Member Agencies contribute based on a combination of parcels they serve and their groundwater extraction or consumption. This approach would acknowledge that while groundwater extraction volume is undoubtedly tied to MGA costs, some degree of costs stem from overarching management of the Basin and relate more to the number of stakeholders that utilize groundwater resources. This type of structure could ensure that all beneficiaries contribute to Basin management, while users with greater extraction volumes pay proportionally more.

Development of Methodology

Developing a hybrid approach involves determining the appropriate share of SGMA compliance costs to allocate to each component. A common framework would assign land-based charges to fund general administrative costs and volumetric charges to fund activities more directly related to groundwater use, such as data collection, reporting, and modeling. This could prevent the need for calculation of groundwater use on a parcel scale.

The proportion of costs allocated to each charge could be based on estimated benefit, cost responsibility, or policy objectives. For example, MGA might fund 40% of its budget through a uniform land-based charge and 60% through volumetric charges.

Administrative Efficiency

A hybrid structure would require moderate administrative effort. If charging private users under a fee, the land-based component could be collected through the County tax roll with minimal annual updates, while the volumetric portion would rely on reported or estimated groundwater use from Member Agencies and other large extractors. Because the volumetric portion would likely apply to a limited number of entities, annual administration would remain manageable.

If using a hybrid approach to inform a self-funding structure, administration would be highly efficient. Both the number of parcels served by Member Agencies and their annual extraction amounts can be updated as MGA determines appropriate. This option would minimize administrative burden while maintaining a clear relationship between cost allocation and groundwater use.

Applicability to MGA

A hybrid methodology is well suited to MGA's needs. The Basin includes both large municipal pumpers with reliable reporting and smaller, less-documented private users. Under a fee, a dual structure would allow MGA to recover the bulk of costs proportionally from Member Agencies while maintaining a fair contribution from all beneficiaries through a broad land-based charge. This approach would also work well to inform any revisions to MGA's existing cost-sharing framework and could evolve naturally into a formalized fee structure.

While slightly more complex than a single-method program, a hybrid approach provides flexibility to adjust allocations and rate structures over time without major structural changes. This blended model has the potential to provide both stability and equity, aligning well with MGA's varied user base and long-term management needs.

Table 11 - Hybrid Considerations

Challenges	Advantages
▪ Requires policy decisions on cost allocation between components. ▪ Slightly more complex to develop and communicate.	▪ Balances equity, proportionality, and administrative simplicity. ▪ Supports data availability and a broad payer pool to ensure all beneficiaries contribute.

V. Discussion of Local Considerations

While presenting funding options available to GSAs in California, this Memorandum has identified characteristics of MGA and the Mid-County Basin that should inform key decisions related to funding MGA's SGMA compliance costs. Section V provides a more focused discussion of how local characteristics relate to the evaluation of funding options at MGA's disposal.

The development of an optimal funding strategy requires consideration of groundwater use and impacts on the Basin, equity, and administrative efficiency. While legal frameworks and methodologies provide the foundation for cost recovery, the composition of the payer pool and the approach to cost allocation ultimately determine a funding strategy's viability. For MGA, these considerations are central to the decision of whether to continue relying on Member Agency contributions, to expand participation to other groundwater users, and to determine the methodology basis for cost recovery.

A. Consideration of Equity

A key consideration in evaluating MGA's funding structure is determining what constitutes equity within the context of Basin management. For MGA, equity requires examining how the benefits of groundwater management and impacts of groundwater use are distributed across users and how each user class should share proportionally in SGMA compliance costs.

MGA Services and Benefits

MGA's SGMA compliance activities support the achievement of sustainable Basin conditions. While projects are carried out by MGA Member Agencies, MGA supports the overall coordination of Basin management and maintains local control of the Basin. The question for MGA is whether and to what extent these activities provide measurable benefit to all user classes or primarily to certain groups. Some users may benefit directly from reducing seawater intrusion or improving groundwater reliability, while others, particularly inland users or low-volume users, may not receive the same degree of benefit. Clarifying the type and degree of benefit each user receives is essential in determining whether and how those users should contribute financially to MGA's operations.

One of the primary benefits GSAs provide to groundwater users under SGMA is local control of groundwater resources. The ability to implement groundwater management policy at a local level ensures community involvement and limits the influence of external forces on policy decisions. The Santa Cruz Mid-County Basin is a high priority basin subject to critical conditions of overdraft. If MGA does not fund activities necessary to comply with SGMA, the State Water Resources Control Board ("SWRCB") would declare the Basin "unmanaged" or "probationary" and intervene. Unmanaged or probationary basins are subject to regulatory actions, including annual fees and reporting requirements.

The SWRCB sets its fees for unmanaged and probationary basins annually without input from the community. The current SWRCB fees are set forth below in Table 12. Groundwater users would pay these fees to the State and the funds would not help pay for any local groundwater management activities or programs as identified by the MGA in its GSP. Rather, the SWRCB fees would be used for SWRCB intervention, which includes administration, regulation, and possible implementation and enforcement of pumping restrictions in the Basin.

Table 12 – State Water Resources Control Board Intervention Rates, 2025

Charge	Rate	Notes
Base Filing Fee	$300 per well	Excludes De Minimis Extractors
Unmanaged Area Rate (Metered)	$10 per AF	Excludes De Minimis Extractors
Unmanaged Area Rate (Unmetered)	$25 per AF	Excludes De Minimis Extractors
Probationary Rate	$20 per AF	Excludes De Minimis Extractors
Interim Plan Rate	$55 per AF	Excludes De Minimis Extractors
De Minimis Fee	$100 per well	Optional; Subject to SWB determination
Automatic late fee	25% per month	Extraction Reports Not Filed By Due Date

Cost Apportionment: Broad versus Specific Benefits

When allocating costs, GSAs often evaluate whether their activities provide broad Basin-wide benefits or specific localized benefits. Costs such as GSP reporting, Basin monitoring, and regional data management might be perceived as providing a broad, general benefit and could reasonably be distributed across a wider pool of users.

Conversely, costs tied to actions that address localized conditions may provide specific benefit to a smaller set of users, such as coastal municipal systems, and could justifiably remain funded primarily by those agencies. For example, SGMA compliance activities that support the issue of seawater intrusion or baseflow influence might be identified as providing a benefit specifically to a geographical characteristic, and costs might be allocated based on this characteristic. For MGA, distinguishing between broad and specific benefits will be key to establishing a cost-allocation framework that is both defensible and equitable.

Impacts to the Basin

Equity also requires consideration of which users contribute most to the conditions that drive management costs. Understanding these relative impacts can help MGA determine which users to include, whether a uniform or variable cost structure is appropriate, and whether different activities should be funded differently based on the source of demand they address. Consideration of impacts relates directly to the concept of cost drivers, as discussed in detail below under Section V, Subsection B.

Pumping along the coast has been identified as the primary factor influencing seawater intrusion. Coastal pumping includes municipal pumping, agricultural pumping, and institutional pumping. Pumping that occurs inland and has a lesser effect on coastal groundwater levels[15]. Similarly, pumping that occurs near creeks may influence conditions related to surface water depletion and could be tied to impacts on interconnected surface water.[16] Lastly, pumping from the Aromas and Purisima F aquifers has been tied to reduction in groundwater storage.[17] Based on this understanding, geographic or hydrogeologic characteristics might be used to evaluate how certain pumping impacts Basin sustainability.

Extraction versus Consumption

Equity may also be informed by the difference between total extraction and net consumption. A volumetric approach could be based on either extraction volume (reflecting total groundwater pumped) or consumptive use (reflecting only the portion of groundwater that is depleted from the Basin). While extraction-based methods are simpler, a consumptive use approach could account for groundwater extracted that ultimately returns to the underlying basin, which is particularly prevalent in areas with high concentrations of septic systems. Different percentages of total extraction are consumed by different users depending upon the use in question. Charges based on consumptive use rather than total extraction could better reflect the net effect on Basin conditions; however, it is important to note that the Basin has a complex series of stacked aquifers and the recharged water does not necessarily recharge the aquifer from which it was extracted. This is an important consideration because the sustainable management criteria for extraction was established for each primary aquifer. Allowing a "credit" in the form of using consumption may not reflect the full impact of the initial extraction of groundwater from an aquifer. This approach would be more complex and require refining understanding of consumptive use in the Basin.

[15] GSP, 2-203.
[16] GSP, 2-204.
[17] GSP, 2-204.

It is important to note that consumption will always be less than extraction, reducing the total AF amount across which costs are allocated. This increases the rate per AF (the same cost divided by less water use produces a higher rate). Additionally, consumption can be more difficult to track and update. For example, groundwater recharge projects implemented by MGA Member Agencies are expected to increase in the coming years – which would alter the basis of revenue.

B. Cost Drivers

As described in Section II, cost drivers are the underlying Basin conditions and management activities that influence MGA's annual and long-term expenditures. They represent the practical link between the Basin's physical characteristics, groundwater use, and the actions required to achieve Basin sustainability. Cost drivers in the Mid-County Basin can generally be grouped into two categories:

(1) Broad management activities that support overall Basin sustainability.
(2) Monitoring and technical efforts tied to specific sustainability indicators.

Broad Basin Management Activities

A substantial portion of MGA's costs arises from Basin-wide management activities that support the sustainable use of groundwater and SGMA compliance. These include maintaining the Basin monitoring network, collecting and analyzing groundwater data, preparing annual reports and five-year GSP evaluations, conducting Board and stakeholder meetings, and coordinating with DWR and Member Agencies. These activities ensure that Basin data is reliable, conditions are understood, and management decisions are based on sound technical information. They benefit all groundwater users by supporting continued SGMA compliance and coordinated Basin management.

When considering costs driven by broad basin management activities, MGA might connect them broadly to all groundwater users, as they relate to management of the Basin in a broad sense. This may include a portion of costs – such as agency overhead – or all costs, depending on MGA's perspective.

Monitoring & Technical Efforts Associated with Specific Impacts

MGA also incurs costs associated with conditions identified as active sustainability indicators. These condition-specific drivers influence portions of MGA's technical and analytical expenditures. When considering costs driven by specific sustainability indicators, MGA faces the question of whether to allocate a portion of costs to the users driving sustainability efforts – or to allocate them broadly based on the perspective that all costs are driven by Basin extraction in general. Costs could be allocated differently based on factors such as location of pumping (geographic characteristics), extraction characteristics (hydrogeologic characteristics), or type of use (user characteristics). The potential to tie these characteristics to costs is a consideration for MGA as it looks to better understand an equitable funding structure.

This question relates to discussion in the GSP regarding potential "management areas" within the Basin that could be established to utilize different management strategies for areas with different groundwater use and variable effects on Basin sustainability. The GSP noted four possible management zones that could be considered for this reason: an Inland Private Well Area, and Aromas Red Sands Area, an Area of Municipal Groundwater use, and an area of Alluvial Channels of Major Creeks.[18] This type of classification exemplifies how MGA could consider allocating costs based on the location pumping is occurring, the aquifer pumping is extracting from, or the type of pumping that is occurring. For example, the GSP notes that inland non-municipal pumping has less influence on Basin sustainability (GSP, 2-203).

While it discussed the possibility of creating separate management zones, the GSP ultimately did not recommend establishing them for the purpose of defining different minimum thresholds or measurable objectives, finding no benefit to this approach because "representative monitoring locations and monitoring requirements are set specifically for each sustainability indicator."[19] However, this does not preclude using this type of approach to allocating MGA costs across various groundwater users. The following subsections provide context for how various groundwater users might be tied to sustainability indicators, and in turn could influence how MGA might allocate costs based on differences in groundwater use across the Basin.

[18] GSP, 2-203.
[19] GSP, 2-204.

Seawater Intrusion

Seawater intrusion remains a primary cost driver, as groundwater levels in portions of the coastal area continue to fall below their respective sustainable management criteria, allowing the continued threat of inland migration of seawater.[20] These conditions are primarily influenced by coastal pumping, which includes municipal production and some agricultural and institutional groundwater use. Addressing this condition requires ongoing monitoring of coastal wells, groundwater-model updates, and technical evaluations to support restoration of groundwater elevations and maintaining of chloride concentrations as an indicator of intrusion status.

Seawater intrusion management strategies have been identified to include development of a hydrogeologic conceptual model, development of water conservation programs, implementation of tiered water pricing structures, managing groundwater pumping to accurately align extraction with recharge rates, relocating pumping inland where extraction is less likely to draw seawater on shore, establish protective groundwater elevations, evaluate the effectiveness of management strategies, and conduct coastal water quality and elevation monitoring[21].

To this end, seawater intrusion drives many MGA costs related to monitoring, reporting, and analysis. MGA should evaluate whether costs driven by efforts to mitigate seawater intrusion should be associated with geographic characteristics or specific user classes within the Basin.

Reduction of Groundwater Storage

Reduction of groundwater in storage is another active cost driver, particularly within the Aromas and Purisima F Aquifers where extraction exceeds its sustainable management criteria. Extractions in these aquifers have periodically exceeded sustainable yield, requiring continued groundwater modeling, data analysis, and assessment of inter-aquifer connections to inform management decisions.[22] While water levels have improved in some monitoring wells following wetter hydrologic years, continued monitoring is necessary to confirm long-term recovery.

Extraction from the Aromas and Purisima F Aquifers drives costs related to monitoring, reporting, and management. MGA should evaluate whether costs driven by this extraction warrant allocating costs to users extracting from these Aquifers.

Interconnected Surface Water

Depletion of interconnected surface water also remains a cost driver, as one monitoring well continues to register below its minimum threshold, indicating potential stream-aquifer interaction concerns.[23] This requires ongoing coordination between groundwater and surface water monitoring programs and data analysis to assess potential impacts.

[20] 2024 Annual Report, 56.
[21] GSP, 2-34.
[22] 2024 Annual Report, 47.
[23] 2024 Annual Report, 61.

MGA should evaluate whether costs associated with monitoring depletion of interconnected surface water should be allocated to specific Basin groundwater users. Proximity of wells to creeks and streams, for example, could be used as a means to link specific groundwater users to costs associated with interconnected surface water.

C. Consideration of What Users to Include

A central decision for MGA relates to which groundwater users should participate in funding. The four primary user classes within the Basin represent a diverse array of stakeholders, all with different perspectives and water resource needs. Determining which groundwater users should participate in funding represents one of MGA's most consequential policy choices. While statutory requirements define what frameworks are legally permissible, MGA must determine which users are practical and appropriate to include based on data availability, equity, and administrative feasibility.

Municipal Users

Municipal users (City, SqCWD, and CWD) account for about 76% groundwater pumping in the Santa Cruz Mid-County Basin. Because all municipal water use is metered, data reliability for this user class is high.

To date, municipal users have historically funded MGA operations through direct contributions, forming the foundation of the current cost-sharing arrangement. Although straightforward to administer, this structure results in municipal agencies bearing a majority of costs associated with SGMA compliance, despite SGMA being a Basin-wide mandate that requires actions benefiting all groundwater users. Whether continued reliance on Member Agencies alone remains equitable and sustainable is a central question for future funding decisions.

Agricultural Groundwater Users

Agricultural use represents a small but distinct category within the Basin. Agricultural extraction is estimated to account for an estimated 7% percent of total groundwater use. The limited extent of irrigated acreage, combined with inconsistencies in DWR crop mapping data, makes it difficult to determine the precise number of irrigation wells or parcels actively irrigated in any given year. Agricultural pumping data used in the Basin model are primarily derived from estimated applied water rates and crop-type mapping, which is known to be unreliable.

From a funding perspective, inclusion of agricultural users in a fee program would be consistent with a desire for non-de minimis groundwater users to contribute to the cost of management. However, their relatively small pumping volume and a lack of data supporting a parcel-scale understanding of agricultural groundwater use would introduce challenges if they were charged a fee. Refinement of agricultural groundwater use data would be required in order to include these users in a fee, as current estimates may not meet Proposition 26 or 218 standards. Implementation of the recently adopted metering program on agricultural users would help resolve this issue, although it may take some time for the data to fully develop. Consideration of incorporating agricultural users into a fee structure should carefully weigh administrative effort and revenue potential against the principle of shared responsibility.

Institutional Groundwater Users (Schools, Golf Courses, Small Public Water Systems)

Institutional groundwater users collectively account for around 5% of total Basin extraction. Like municipal systems, institutional wells used by small public water systems are metered, which provides reliable data for potential inclusion. Other entities, such as schools and golf courses, provide less reliable data but are limited in scope of parcels and extraction.

The institutional category falls between municipal and agricultural users in administrative complexity. While their overall groundwater use is relatively small, these users are part of the broader community network that depends on sustainable Basin conditions. Including institutional users in a funding program would slightly expand the payer base, although it would increase administrative burden by developing and maintaining a fee program.

Private Domestic Users (De Minimis Users)

Private domestic users are located throughout the Basin but are largely concentrated in the inland portion of the Basin and collectively account for approximately 12% of Basin extraction. Most private wells are unmetered, and data on extraction volumes are derived from estimates based on reported data from small water systems rather than direct reporting. Two primary considerations contribute to evaluating whether to incorporate these users: the extent to which they benefit from MGA's SGMA compliance activities or produce impacts to the Basin, and the inherent challenges that would come with charging them directly.

The question of whether these users benefit from SGMA compliance in the Basin has implications depending on the legal framework MGA uses to allocate costs. Under a self-funding framework, private domestic users could be accounted for by the County's contribution or excluded entirely. However, under a fee program, considering whether these users are charged must also adhere to constitutional proportionality requirements. If a fee program is developed that excludes these users, it must be on the basis that they are not provided a benefit or service by MGA's activities. Additionally, under a Water Code § 10730 fee, these users must be "regulated" to be charged – which would require MGA to establish regulation of these users. Of the 32 GSAs analyzed by SCI and MGA, 17 charged de minimis users, 14 did not charge de minimis users, and one GSA reported that it did not have any de minimis users (see Appendix A for more information).

Including this user class in a funding program would necessitate additional consideration of equity. On one hand, private domestic wells rely on Basin-wide conditions maintained through MGA management and could be viewed as beneficiaries. On the other, their assumed impact on Basin conditions as characterized in the GSP is minimal. Charging these users directly would require identifying hundreds of individual well owners and parcels served by shared wells, establishing reasonable estimates of extraction, and demonstrating a proportional relationship between benefit and cost.

D. Example Conceptual Rate Scenarios

During this funding options evaluation, the MGA Board requested specific examples be developed to provide perspective on the range of potential fees based on differing methods and the inclusion of various groups of users. To illustrate potential revenue structures for MGA, conceptual funding frameworks are provided below that were presented to the Board in December 2025. Each reflects differing levels of inclusivity, administrative complexity, and alignment with the principle that those who benefit from or drive costs related to Basin sustainability should share in its costs. Preliminary conceptual rate scenarios are provided for each framework to illustrate potential rates and revenue allocation across user classes. A combination of directly measured, calculated, and estimated data are used as inputs for these rates, as discussed in Section II.

A total baseline annual revenue need of $525,000 is assumed to project rates, along with projected additional costs to implement and administer a fee. This Memorandum estimates an additional $24,000 - $33,000 in annual costs stemming from implementation and administration of a fee placed directly on private groundwater users. The annual revenue need is used for illustrative purposes only. Any direction to pursue a funding strategy beyond Member Agencies-only would be subject to additional analysis and a comprehensive fee study.

The following preliminary rate scenarios are analytical in nature and intended to illustrate how costs could be allocated under different participation frameworks. They are not intended to reflect current MGA policy or imply a preferred future approach. In the tables below private use is separated into private domestic de minimis and private non-de minimis user classes. Conceptual Scenario 4 excludes the domestic de minimis user class extraction as an example where MGA would determine that their use has no significant impact on Basin sustainability. However, Scenario 4 does consider the number of domestic parcels assumed to be using groundwater as an example where they could be seen as receiving a broad benefit from the Basin's compliance with SGMA. Under any of these scenarios, the exclusion of de minimis groundwater use and parcels is also a possible outcome that MGA would need to consider.

Finally, it is important to note that the County of Santa Cruz is not shown in these tables, even though it has contributed to MGA since its inception. The intent of the conceptual scenarios is to show the relative scale of each user class under different methodologies that have been used in fee development under SGMA. Any decision on whether some or all of the private user class fees would be paid by the County or directly by private users is another decision that MGA would also need to consider.

All preliminary rate scenarios are summarized in Table 19 under Appendix B.

Summary of Groundwater Use Characteristics Across User Classes

In order to illustrate conceptual rate scenarios, this Memorandum utilizes characteristics related to groundwater use a means to demonstrate how various methodologies might be applied to Basin user classes. Groundwater extraction, groundwater consumption, and the number of groundwater-using parcels are discussed below.

These characteristics stem from a variety of data sources and in some cases require estimation. Under the example conceptual rate scenarios (tables 15 – 18), specific assumptions are noted related to data estimates and approach.

Extraction

Calculation of Basin extraction varies based on the user class. As noted above, some users (including municipal users and small water systems) have metered data. Extraction for other users (including private domestic and agricultural users) must be estimated. SCI compiled information from five years of MGA Annual Reports (2019 – 2024) to calculate average extraction amounts for each user class, as shown in Table 14.

Consumption

Consumption refers to the portion of extraction that is consumed by the user. Calculation of Basin consumption relies on extraction amounts and consumptive use estimates related to each type of use in question. MGA's integrated surface water-groundwater model ("model") includes estimation of water percolating back into the Basin; however it did not discern what percentage of the return water could be quantified consumptive groundwater use as water entering septic systems and used for irrigation is returned to the shallowest aquifer layers and not necessarily returning to the deeper aquifer from which it was extracted .

Table 13 below lists the different percentages of extraction that are estimated to be consumed by various users within the Basin. Note: The remaining percentage of extraction should not be assumed to percolate back into the aquifer as the model did not analyze recharge of this shallow return of water to that level of detail.

Table 13 - Estimated Percentage of Extraction that is Consumed

User Class	% of Extraction that is Consumed
Private Domestic	33%
Agricultural	85%
Insitutional / Small Water Systems	33%
Central Water District	40%
City of Santa Cruz	75%
Soquel Creek Water District	75%

Parcels

Another pertinent characteristic of groundwater use relates to the number of parcels within each user class. This generally correlates to the approximate number of end users within each class – the number of users served by water systems or operating privately-owned wells.

Parcel counts within each municipal water provider and small water system are informed by the number of service connections. For agricultural parcels, a generalized estimate is used based on review of aerial photography. As noted above, MGA consultants and the SCI Team conducted an analysis to approximate the number of private domestic parcels that rely on groundwater. By isolating all parcels with residential County use codes that are within the Basin but outside of water system service areas, this Memorandum estimates that approximately 1,905 domestic parcels rely on de minimis wells in the Basin.

Table 14 below provides a summary of extraction, consumption, and parcels as described above.

Table 14 - Summary of Estimated Groundwater Use Characteristics

Member Agency / User Class	Current Funding Contribution	Average Extraction		Average Consumption		Groundwater-Using Parcels	
		AF	%	AF	%	Parcels	%
Central Water District	10%	391	8%	156	5%	766	3%
City of Santa Cruz	10%	383	8%	287	9%	11,819	40%
Soquel Creek Water District	70%	3,066	60%	2,300	69%	14,743	50%
County of Santa Cruz	10%	NA	NA	NA	NA	NA	NA
Private - Institutional	0%	279	5%	92	3%	286	1%
Private - Agriculture	0%	353	7%	300	9%	70	0%
Private - Domestic (De Minimis)	0%	621	12%	205	6%	1,905	6%
Subtotal - Private Users	0%	1,252	25%	597	18%	2261	8%
Total	NA	5,092	100%	3,340	100%	29,589	100%

Conceptual Scenario 1: Extraction-Based Funding Structure

This framework utilizes Basin extraction as a means of apportioning costs. As noted previously, extraction for some users (municipal users and some institutional users) is metered and determined by available data. For other uses, including agricultural and private domestic users, estimates and assumptions inform these preliminary scenarios.

Scenario 1 models an extraction-based approach in which costs are allocated across all Basin groundwater use, with the County contributing on behalf of private domestic (de minimis) users. If MGA were to determine that de minimis users do not benefit from MGA's SGMA compliance activities, their extraction could be removed from the scenario.

Because this scenario involves the potential to charge private users directly, an additional $33,000 is incorporated into the annual revenue need to account for fee implementation and administration (as discussed in Section II). This potential additional cost informs a revenue range of $525,000 - $558,000 – producing an annual rate range of $103 – $110 per AF.

Table 15 – Extraction-Based Funding Structure

Member Agency / User Class[1]	Average Annual Extraction (AF)	Percentage of Extraction
Central Water District	391	8%
City of Santa Cruz	383	8%
Soquel Creek Water District	3,066	60%
Private Non-De Minimis[2]	631	12%
Private Domestic (De Minimis)	621	12%
Total	5,092	100%

(1) While the County of Santa Cruz does not extract groundwater, it is anticipated that the County will continue to contribute to MGA costs in recognition of the County-wide benefit of sustainable groundwater management. The County's contribution could be based on covering a subset of users, such as private domestic, or some other means.
(2) Private non-de minimis extraction includes agricultural and institutional groundwater use. This extraction could be addressed by charging these users directly or by Member Agencies covering it under a self-funding agreement.

Conceptual Scenario 2: Consumption-Based Funding Structure

This framework utilizes Basin consumption as a means of apportioning costs. As noted previously, consumption is the portion of extraction consumed by the user. Estimating net consumptive use percentages from the Basin would need to be performed in order to use this approach. The current groundwater model estimates water returned to the Basin but does not discern percentages that could be available for subsequent groundwater extraction (e.g., some shallow recharged groundwater could discharge to creeks). It is important to note that consumption-based approaches would also need to account for managed aquifer recharge and other factors, which were not included in the examples contained within this memo, making them more complex and potentially requiring additional administrative efforts over time.

Scenario 2 models a conceptual consumption-based approach in which costs are allocated across all Basin groundwater use. If MGA were to determine that de minimis users do not benefit from MGA's SGMA compliance activities, their consumption could be removed from this scenario. This scenario also does not include managed aquifer recharge, which would need to be evaluated and included if such a funding approach were to be further pursued.

Because this scenario involves the potential to charge private users directly, an additional $33,000 is incorporated into the annual revenue need to account for fee implementation and administration (as discussed in Section II). This potential additional cost informs a revenue range of $525,000 - $558,000 – producing an annual rate range of $157 – $167 per AF. Note that under a consumption-based approach, costs are allocated across less groundwater use – creating a higher rate per AF.

Table 16 – Consumption-Based Funding Structure

Member Agency / User Class[1]	Average Annual Extraction (AF)	Percentage of Extraction Consumed[2]	Average Annual Consumption (AF)	Percentage of Consumption
Central Water District	391	40%	156	5%
City of Santa Cruz	383	75%	287	9%
Soquel Creek Water District	3,066	75%	2,300	69%
Private Non-De Minimis[3]	631	Variable	392	12%
Private Domestic (De Minimis)	621	33%	205	6%
Total	5,092	NA	3,340	100%

Note: Managed aquifer recharge projects implemented by the City of Santa Cruz and Soquel Creek Water District are not included in this table and would need to be factored in as those projects begin operation.

(1) While the County of Santa Cruz does not extract groundwater, it is anticipated that the County will continue to contribute to MGA costs in recognition of the County-wide benefit of sustainable groundwater management. The County's contribution could be based on covering a subset of users, such as private domestic, or some other means.
(2) The percentage of extraction consumed by each user or user type is based on estimates used in the Basin model.
(3) Private non-de minimis consumption includes agricultural and institutional groundwater use. This consumption could be addressed by charging these users directly or by Member Agencies covering it under a self-funding agreement.

Conceptual Scenario 3: Hybrid Funding Structure – Extraction and Parcels

A hybrid approach combines multiple types of charges in an effort to balance equity and administrative practicality. For MGA, this could mean using a land-based charge to recover broad administrative and monitoring costs paired with a volumetric or extraction-based component to recover costs that might be more connected to the amount of groundwater used. This blended framework provides flexibility to align costs with both Basin-wide benefits and user-specific impacts, while maintaining stable and predictable revenue.

Scenario 3 introduces a hybrid approach that incorporates an extraction charge and a parcel charge. In this scenario, costs are split equally, with 50% apportioned to the extraction charge and 50% apportioned to the parcel charge. The County is shown as contributing on behalf of private domestic users. If MGA were to determine that de minimis users do not benefit from MGA's SGMA compliance activities, their consumption could be removed from this scenario.

Because this scenario involves the potential to charge private users directly, an additional $33,000 is incorporated into the annual revenue need to account for fee implementation and administration (as discussed in Section II). This potential additional cost informs a revenue range of $525,000 - $558,000. The annual rate ranges for each charge are $52 - $55 per AF and approximately $9 per parcel.

Table 17 – Hybrid Funding Structure – Extraction and Parcels

Member Agency / User Class[1]	Estimated Annual Extraction (AF)	Percentage of Extraction	Parcel Count	Percentage of Parcels	Weighted Percentage[2]
Central Water District	391	8%	766	3%	5%
City of Santa Cruz[3]	383	8%	11,819	40%	24%
Soquel Creek Water District	3,066	60%	14,743	50%	55%
Private Non-De Minimis[4]	631	12%	356	1%	7%
Private Domestic (De Minimis)	621	12%	1,905	6%	9%
Total	5,092	100%	29,589	100%	100%

(1) While the County of Santa Cruz does not extract groundwater, it is anticipated that the County will continue to contribute to MGA costs in recognition of the County-wide benefit of sustainable groundwater management. The County's contribution could be based on covering a subset of users, such as private domestic, or some other means.
(2) The weighted percentage is calculated by utilizing the combined weight of both the extraction and parcel portions (in this example, both are weighted at 50%).
(3) The City of Santa Cruz parcel count represents an estimate of City parcels within the Basin. The City typically receives about 90% of its supply from surface water, so the number of parcels benefitting from groundwater would need to be subject to additional evaluation.
(4) Private non-de minimis extraction and parcel counts include agricultural and institutional groundwater users. These users could be addressed by charging them directly or by Member Agencies covering them under a self-funding agreement.

Conceptual Scenario 4: Hybrid Funding Structure – Technical and Administrative Cost Split

Scenario 4 illustrates a slightly different take on a hybrid approach. In this scenario, costs are split into two categories: 60% are identified as technical costs, which refer to costs related to monitoring, reporting, and data management; and 40% are identified as administrative costs, which refer to general administration costs. In this example, technical costs are applied *only to non-de minimis extractors*. This approach is based on the concept that MGA's technical work is largely driven by monitoring and modeling of impacts of pumping on the coastal portion of the basin where the biggest impacts from seawater intrusion and depletion of interconnected surface water are seen. This example is based on the perspective that technical costs are driven by non-de minimis extraction on the coast (largely municipal extraction, with some agricultural and institutional use). MGA's administrative costs are then allocated to parcels based on the concept that they provide a broad benefit.

In this example, extraction of private domestic users is excluded from the technical cost portion with an assumption that they are not responsible for those costs being incurred. However, the number of private domestic parcels is included with an assumption that all basin users benefit from administration of the agency. Both of these assumptions would be subject to additional consideration if this approach was to be further pursued.

Any effort to further develop an approach similar to Scenario 4 would require further refinement of the cost split between administrative and technical costs. A similar approach could also be used to create a coastal "rate zone," in which all groundwater users pay for administrative costs and only users near the coast pay for certain aspects of technical costs associated with Basin impacts. While Scenario 4 is not based on geographic characteristics, most non-de minimis pumping does occur on the coast.

Because this scenario involves the potential to charge private users directly, an additional $33,000 is incorporated into the annual revenue need to account for fee implementation and administration (as discussed in Section II). This potential additional cost informs a revenue range of $525,000 - $558,000. The annual rate ranges for each charge are $70 - $75 per AF and $7 – $8 per parcel.

Table 18 - Hybrid Funding Structure – Technical and Administrative Cost Split

Member Agency / User Class[1]	Estimated Annual Non-De Minimis Extraction (AF)	Percentage of Non-De Minimis Extraction	Parcel Count	Percentage of Parcels	Weighted Percentage[2]
Central Water District	391	9%	766	3%	6%
City of Santa Cruz[3]	383	9%	11,819	40%	21%
Soquel Creek Water District	3,066	69%	14,743	50%	61%
Private Non-De Minimis[4]	631	14%	356	1%	9%
Private Domestic (De Minimis)[5]	NA	NA	1,905	6%	3%
Total	4,471	100%	29,589	100%	100%

(1) While the County of Santa Cruz does not extract groundwater, it is anticipated that the County will continue to contribute to MGA costs in recognition of the County-wide benefit of sustainable groundwater management. The County's contribution could be based on covering a subset of users, such as private domestic, or some other means.
(2) The percentage of revenue is calculated by utilizing the combined weight of both the extraction and parcel portions (in this example, extraction / technical costs are weighted at 60% and parcels / administrative costs are weighted at 40%).
(3) The City of Santa Cruz parcel count represents an estimate of City parcels within the Basin. The City typically receives about 90% of its supply from surface water, so the number of parcels benefitting from groundwater would need to be subject to additional evaluation.
(4) Private non-de minimis extraction and parcel counts include agricultural and institutional groundwater users. These users could be addressed by charging them directly or by Member Agencies covering them under a self-funding agreement.

(5) Private domestic users are not allocated any extraction because de minimis use is not charged for technical costs under Scenario 4.

A summary table of these four rate scenarios is included as Appendix B.

E. Summary

The analysis of funding options included in this Memorandum underscores the need to balance considerations of equity and administrative feasibility in determining the optimal funding approach for MGA. Each funding strategy offers different elements of proportionality, complexity, and flexibility. To ensure equitable and reliable cost recovery, MGA must evaluate the appropriate level of participation by groundwater users and Member Agencies and the optimal means of recovering costs.

Regardless of which users are included in a funding structure equity remains central to determining how costs should be allocated. Some MGA activities may provide broad benefits that support the state mandate placed upon the Basin as a whole. Other activities may primarily benefit a subset of users, such as coastal groundwater users, users extracting at points of interconnected surface water, or users extracting from the Aromas and Purisima F Aquifers. Conceptual Rate Scenario 4 above illustrates one way this could be addressed – by parsing out technical costs from administrative costs and allocating them to specific subsets of users. Conversely, if MGA believes that all costs provide a broad, general benefit (or address uniform impact to the Basin or meet regulatory compliance administration), a simpler extraction-based approach may be an appropriate framework. Recognizing these distinctions will help MGA identify whether costs should be distributed widely or whether they should be borne by users who directly influence or benefit from these activities.

Administrative feasibility must also guide evaluation of funding options. While fee-based frameworks under the Water Code provide legally sound mechanisms for cost recovery, they also require outreach, data accuracy, and ongoing management that add cost and complexity. In contrast, continued Member Agency-only funding structures may provide efficient and adaptable pathways. Ultimately, the best approach will be one that equitably accounts for benefit and impact while remaining sustainable and administratively practical.

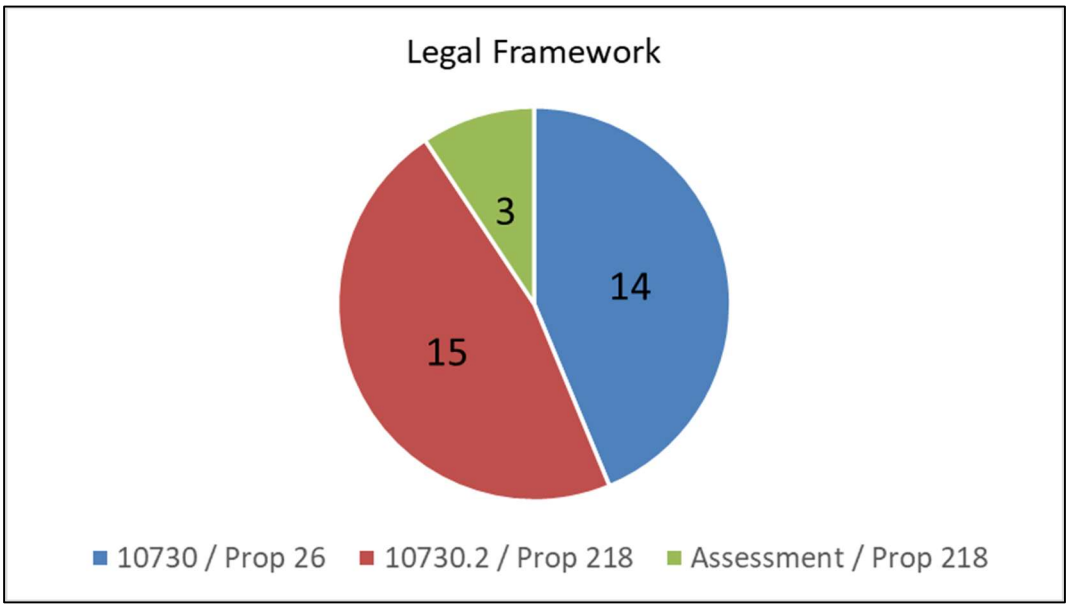
Appendix A: Summary of GSA Funding Approaches

As noted in Section I and referenced throughout this memorandum, SCI and MGA compiled and reviewed information on how 32 other GSAs have approached long-term funding. This review examined the legal authority used, the methodology and rate structure, whether private domestic groundwater users were assessed fees, and groundwater use volumes of various user classes within each GSA. Summary graphs are provided below to highlight the various approaches and the frequency of their use related to other GSAs analyzed.

GSA Legal Framework

GSA legal framework refers to the legal basis of a charge. Of the 32 GSAs analyzed, 15 utilized Water Code § 10730 / Proposition 26, 14 utilized Water Code § 10730.2 / Proposition 218, and three utilized benefit assessments / Proposition 218. Note that § 10730 fees are easier to implement but can only cover the cost of GSA "program administration" (not capital costs). In some cases, GSAs decide to utilize § 10730.2 / Proposition 218 because they have capital costs that cannot be funded with § 10730 / Proposition 26. Benefit assessments, also under Proposition 218, are not referenced in the Water Code but provide flexible revenue that can also cover administrative and capital costs.

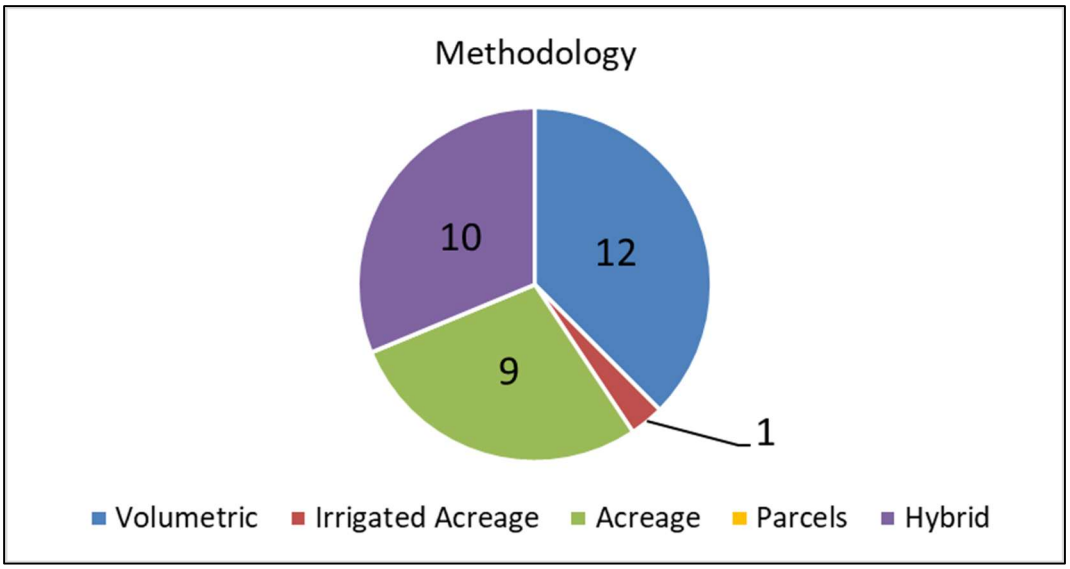
Figure 3 - GSA Legal Frameworks



GSA Methodology

GSA methodology refers to the methodological basis of a charge. Of the 32 GSAs analyzed, 12 utilized a volumetric methodology, 10 utilized a hybrid methodology with multiple charge types, nine utilized a land-based acreage methodology, and one utilized an irrigated acreage methodology. Determination of the optimal methodology requires analysis of a GSA's groundwater users and costs. Many options are available to GSAs that can appropriately allocate costs to groundwater users.

Figure 4 - GSA Methodologies



Of the GSAs using hybrid methodologies, many different combinations of charges were identified. These combinations are listed below for reference.

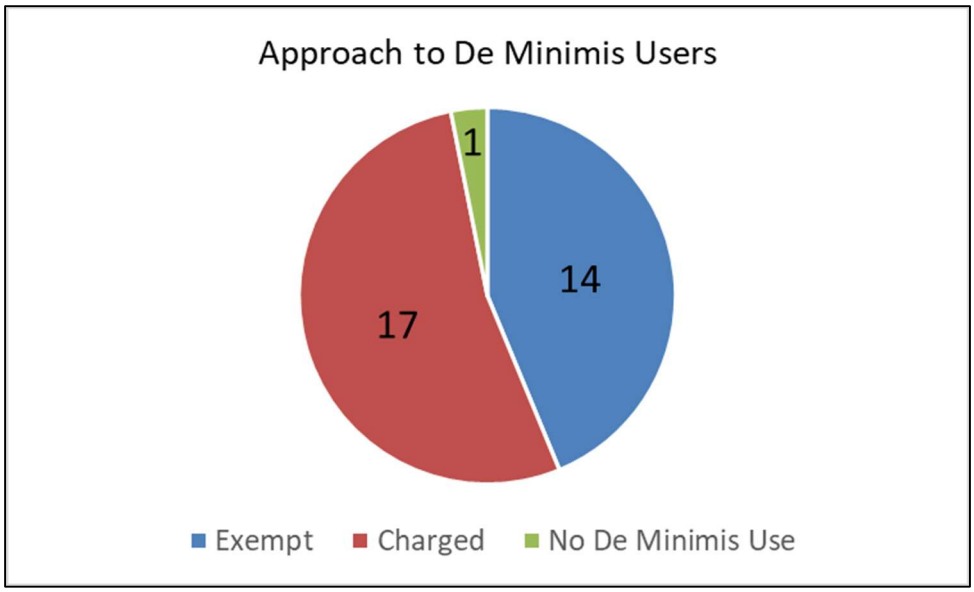
- Volumetric / Acreage.
- Volumetric / Parcels.
- Volumetric / Wellheads.
- Volumetric / Irrigated Acreage / Acreage.
- Volumetric / Irrigated Acreage / Parcels.
- Irrigated Acreage / Water Connections.
- Irrigated Acreage / Acreage.
- Irrigated Acreage / Parcels.

Charging De Minimis Users

The question of whether to include private domestic (de minimis) users in a fee program has several legal and policy implications. As noted in Section V, considering whether these users are charged must adhere to constitutional proportionality requirements. If a fee program is developed that excludes these users, it must be on the basis that they are not provided a benefit or service by MGA's activities. De minimis users are (by definition) minimal users of groundwater individually. However, GSAs handle this differently depending on many factors, including the number of de minimis users within a Basin, the types of costs a GSA has and whether they benefit de minimis users, and the logistical challenges surrounding engaging and charging these users.

Of the 32 GSAs analyzed, 17 charged these users a fee, 14 did not charge them a fee, and one GSA did not have de minimis groundwater use occurring within its jurisdiction.

Figure 5 - Charging De Minimis Users



Appendix B: Rate Scenario Summary Table

Table 19 - Preliminary Conceptual Rate Scenario Summary Table

Member Agency / User Class	Current Funding Agreement	Scenario 1: Extraction	Scenario 2: Consumption	Scenario 3: Hybrid Parcels & Extraction	Scenario 4: Hybrid Technical Cost Split
	Revenue Percentage (Proportional Share of Revenue Under Each Methodology)				
Central Water District	10%	8%	5%	5%	6%
City of Santa Cruz	10%	8%	9%	24%	21%
Soquel Creek Water District	70%	60%	69%	55%	61%
County of Santa Cruz[1]	10%	0%	0%	0%	0%
Private Non-De Minimis	0%	12%	12%	7%	9%
Private Domestic (De Minimis)	0%	12%	6%	9%	3%
Rate Ranges & Additional Annual Costs					
Per Acre Foot	NA	$103 - $110	$157 - $167	$52 - $55	$70 - $75
Per Parcel	NA	NA	NA	$9 - $9	$7 - $8
Potential Additional Annual Costs[2]	NA	$24,000 - $33,000	$24,000 - $33,000	$24,000 - $33,000	$24,000 - $33,000

(1) While the County of Santa Cruz does not extract groundwater, it is anticipated that the County will continue to contribute to MGA costs in recognition of the County-wide benefit of sustainable groundwater management. The County's contribution could be based on covering a subset of users, such as private domestic, or some other means.

(2) Potential additional annual costs refers to the estimated costs of implementing and administering a fee program that include private users. Implementation costs include a fee study, data refinement, and outreach amortized over a five-year period. Administration costs include annual data updates and collection costs.

Note that all scenarios include varying assumptions as noted in Tables 15 through 18. These scenarios are for example purposes only and are by no means exhaustive. Pursuit of any approach would be subject to review of underlying data assumptions used to determine these percentages.