#### San Gorgonio Pass Water Agency

**DATE:** May 5, 2025

**TO:** Board of Directors Meeting

**FROM:** Lance Eckhart, General Manager

**BY:** Matt Howard, Operations Manager

SUBJECT: CONSIDER APPROVAL OF AGREEMENT FOR INTERBASIN

UNDERFLOW COORDINATION STUDIES BETWEEN THE BEAUMONT BASIN, SAN GORGONIO PASS SUBBASIN, AND INDIO SUBBASIN

#### RECOMMENDATION

Authorize the General Manager to enter into a professional services agreement with Provost & Pritchard Consulting Group, including their subconsultant INTERA, to perform interbasin underflow coordination studies for a total not-to-exceed amount of \$99,995.

#### PREVIOUS CONSIDERATION

- San Gorgonio Pass Groundwater Sustainability Agency March 4, 2025: Provost & Pritchard and INTERA presented the interbasin coordination study to the Groundwater Sustainability Agency (GSA), highlighting the importance of inflows and outflows of the San Gorgonio Pass Subbasin
- <u>Beaumont Basin Watermaster September 4, 2024:</u> The Beaumont Basin Watermaster approved a study investigating Basin Losses and provided study updates to the Watermaster at each subsequent meeting.

#### **BACKGROUND**

The San Gorgonio Pass Water Agency (SGPWA) has partnered with the Provost & Pritchard and INTERA consulting groups and other regional stakeholders to develop and implement the San Gorgonio Pass Groundwater Sustainability Plan (GSP). As part of ongoing efforts to improve the accuracy of groundwater modeling and management across the region, Interbasin underflow studies have been proposed to evaluate and refine boundary conditions between the San Gorgonio Pass Subbasin and its neighboring basins: the Beaumont Basin and the Indio Subbasin.

Provost & Pritchard Consulting Group, in collaboration with INTERA, has submitted a proposal outlining a two-task scope of work focused on:

1. Coordination with the Coachella Valley Water District and Todd Groundwater on underflows from the San Gorgonio Pass Subbasin to the Indio Subbasin.

2. Coordination with the Beaumont Basin Watermaster and Thomas Harder & Co. on underflows from the Beaumont Basin to the San Gorgonio Pass Subbasin.

This work builds upon existing modeling frameworks and supports the upcoming five-year GSP Periodic Evaluation due in early 2027.

#### **ANALYSIS**

Understanding the movement of groundwater between basins is a critical component of sustainable basin management under the Sustainable Groundwater Management Act (SGMA) and the Beaumont Basin Watermaster. This project will improve technical consistency across subbasin models, reduce uncertainty in boundary flow assumptions, and promote coordinated regional groundwater management.

This project's scope includes hydrogeologic data review, model boundary conditions analysis, underflow assumptions refinement, and coordination meetings with adjacent basin consultants and agencies. INTERA will serve as the technical lead for modeling and analysis, with Provost & Pritchard providing project oversight and quality control in alignment with the GSP periodic review process.

The project deliverables will contribute to long-term planning efforts, strengthen confidence in the regional groundwater model, improve water budget accuracy, and foster enhanced coordination and collaboration among regional stakeholders. Additionally, the results will assist the Beaumont Basin Watermaster in refining the underflow component of its groundwater model and will support the Indio Subbasin GSA in reassessing and updating the estimated inflows from the San Gorgonio Pass Subbasin.

In partnership with Desert Water Agency, a member of both the San Gorgonio Pass GSA and the Indio Subbasin GSA, the cost of Task #1 will be shared equally between the Agency and Desert Water Agency under a 50/50 cost-sharing arrangement. This equal cost split reflects the mutual benefit both agencies will receive from the task, as the resulting data and analysis will provide critical insights for each agency and directly support the upcoming five-year periodic evaluation of the GSP.

Task No.	Task Name	Budget
1	Coordination with the Indio Subbasin	\$43,694
2	Coordination with the Beaumont Basin Watermaster	\$56,301
Total		\$99,995

#### **FISCAL IMPACT**

The General Fund Budget for FY 2024-25 includes \$750,000 in line item 'Local Recharge Feasibility Studies' (line #83), from which no expenditures have been made as of March 31, 2025. This study will be charged to this line item.

As mentioned above, the study is divided into two tasks. Desert Water Agency is participating in a 50-50 cost-share on Task #1, so the Agency will be reimbursed \$21,847. While the total expenditure will be \$99,995, the net cost to the Agency for this study is effectively \$78,148.

#### **AGENCY'S STRATEGIC PLAN APPLICATION**

Support of this interbasin Coordination study with Desert Water Agency is consistent with the Agency's Mission Statement to support the region's quality of life through sustainable water management with the following strategies:

- Align with the current and future water landscape, supporting the region's longterm needs by diversifying the local supply portfolio and advancing water sustainability.
- Maintain, foster, and expand collaboration with local, regional, state, and federal partners to develop strategic solutions to water supply challenges and opportunities.
- Serve the public with dedication, determination, transparency, collaboration, and a commitment to expanding knowledge.

#### **ACTION**

Authorize the General Manager to enter into a professional services agreement with Provost & Pritchard Consulting Group, including their subconsultant INTERA, to perform interbasin underflow coordination studies for a total not-to-exceed amount of \$99,995.

#### **ATTACHMENTS**

- 1. Provost & Pritchard proposal for professional services for the San Gorgonio Pass Interbasin Coordination to Support Underflow Studies
- 2. Cost Sharing Letter of Agreement between San Gorgonio Pass Water Agency and Desert Water Agency

### PROVOST&PRITCHARD

8950 Cal Center Dr, Ste 102 • Sacramento, CA 95826 • (916) 918-2020 www.provostandpritchard.com

April 4, 2025

Lance Eckhart General Manager San Gorgonio Pass Water Agency 1210 Beaumont Ave Beaumont, CA 92223

Subject: Professional Services for San Gorgonio Pass Inter-basin Coordination to Support Underflow

Studies, Beaumont, California

Dear Mr. Eckhart:

Thank you for the opportunity to submit this proposal to provide consulting services for the San Gorgonio Pass Inter-basin coordination to support underflow studies. This proposal discusses our understanding of the project, recommends a scope of services together with associated fees, deliverables and approximate schedules, sets forth our assumptions and discusses other services that may be of interest as the project proceeds.

#### PROJECT UNDERSTANDING

Groundwater management within the San Gorgonio Pass (SGP) Subbasin requires rigorous technical evaluations to ensure sustainable use and compliance with the Sustainable Groundwater Management Act (SGMA). This project encompasses multiple tasks aimed at reviewing model boundary conditions and enhancing coordination with adjacent basins. The modeling efforts will support the decision-making for long-term water resource management.

The scope of work is divided into two tasks:

- 1. Coordination on Study of Underflows between the SGP and Indio Subbasins Evaluating and refining boundary flow conditions between the two subbasins to improve modeling consistency and underflow representation.
- 2. Coordination on Study of Underflows between the SGP Subbasin and Beaumont Basin Evaluating and refining hydrogeologic boundary conditions between these basins to support groundwater sustainability planning.

Each task includes detailed subtasks to ensure a systematic and thorough approach to data review, model updates, scenario evaluation, and stakeholder coordination. These efforts will enhance the accuracy and reliability of groundwater modeling and contribute to informed water management decisions across the region.

For this work, Provost and Pritchard Consulting Group (Provost & Pritchard) will oversee the primary effort by INTERA. Provost & Pritchard and INTERA successfully worked together in developing the Groundwater Sustainability Plan (GSP) for the SGP groundwater sustainability agencies. The proposed work builds on that work in developing the GSP and also supports the upcoming periodic evaluation of the GSP.

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#### **SCOPE OF SERVICES**

The proposed scope of services is described in the attached proposal from INTERA (Attachment A), which is the primary work activity. In addition to the INTERA work effort documented in Attachment A, Provost & Pritchard will be providing oversight and technical review functions for the work effort to ensure consistency with the overall GSP periodic evaluation.

#### PROFESSIONAL FEES

Provost & Pritchard Consulting Group will perform the services in this Project on a time and materials basis, in accordance with our Standard Fee Schedule in effect at the time services are rendered. The reimbursable fees include a 15% mark-up for subconsultant services. The fees will be invoiced monthly as they are accrued, and our total fees, including or exclusive of reimbursable expenses, will not exceed our estimate of \$99,995 without additional authorization.

PROPOSED FEE – SGP UNDERFLOW STUDIES					
TASK	P&P FEE	INTERA FEE	CONTINGENCY	TOTAL FEE	
Task 1 –SGP-Indio Subbasin Underflow	\$8,896	\$30,826	\$3,972	\$43,694	
Coordination					
Task 2 –SGP-Beaumont Basin Underflow	\$10,391	\$40,792	\$5,118	\$56,301	
Coordination					
Total Estimated Fee:				\$99,995	

The line items shown above are estimates and are not intended to limit billings for any given Task. Required task effort may vary up or down from the line item estimates shown, however total billings will not exceed the Total shown without additional authorization. If the scope changes materially from that described above, as a result of any agency's decision or because of design changes requested by the Owner, we will prepare a revised estimate of our fees for your approval before we proceed.

#### **SCHEDULE**

Once we receive a fully executed copy of your contract and are authorized to proceed, we can complete the underflow coordination in approximately six months.

#### **TERMS AND CONDITIONS**

If this proposal is acceptable, please provide a copy of your contract between the San Gorgonio Pass Water Agency and Provost and Pritchard for our signature. These documents will serve as our Notice to Proceed. This proposal is valid for 30 days from the date above.

Respectfully,

Provost & Pritchard Consulting Group

Terry Friewine, RCE 32985

PRINCIPAL ENGINEER

Linda G. Sloan, PG 8299 CHG 930

**AUTHORIZED SIGNATORY** 



#### ATTACHMENT A

March 27, 2025

Terry Erlewine, P.E. Provost & Pritchard Consulting Group 10860 Gold Center Driver, Suite 275 Rancho Cordova, CA 95670

RE: San Gorgonio Pass Inter-basin Coordination to Support Underflow Studies

Dear Mr. Erlewine,

INTERA is pleased to submit this scope of work to assist Provost & Pritchard (P&P) in coordinating support of underflow studies between upgradient and downgradient subbasins.

INTERA has included two tasks: 1) Coordination with the Todd Groundwater and the Coachella Valley Water District on reviewing the San Gorgonio and Indio Subbasin groundwater models to develop recommendations for refinements of the corresponding models to have consistent underflows between the Subbasins; 2) Coordination with the Thomas Harder and Company on behalf of the Beaumont Basin on reviewing the San Gorgonio and Indio Subbasin groundwater models to develop recommendations for refinements of the corresponding models to have consistent underflows between the Subbasins.

#### **Project Understanding**

Groundwater management within the San Gorgonio Pass Subbasin requires rigorous technical evaluations to ensure sustainable use and compliance with the Sustainable Groundwater Management Act (SGMA). This project encompasses multiple tasks aimed at reviewing model boundary conditions and enhancing coordination with adjacent basins. The modeling efforts will support the decision-making for long-term water resource management.

The scope of work is divided into two tasks:

- Coordination on Study of Underflows between San Gorgonio and Indio Subbasins Evaluating and refining boundary flow conditions between the two subbasins to improve modeling consistency and underflow representation.
- Coordination on Study of Underflows between San Gorgonio Pass Subbasin and Beaumont Basin

   Evaluating and refining hydrogeologic boundary conditions between these basins to support groundwater sustainability planning.

Each task includes detailed subtasks to ensure a systematic and thorough approach to data review, model updates, scenario evaluation, and stakeholder coordination. These efforts will enhance the accuracy and reliability of groundwater modeling and contribute to informed water management decisions across the region.

#### Scope of Work

#### Task 1: Coordination on Study on Underflows between San Gorgonio Pass and Indio Subbasins

This task involves supporting a study led by Todd Groundwater on behalf of the Coachella Valley Water District to improve understanding of the hydrogeologic boundary between the San Gorgonio and Indio Subbasins. The study will compare boundary conditions in the existing models of the two subbasins to evaluate their influence on subsurface flow from the San Gorgonio Subbasin to the Indio Subbasin. Preliminary estimates of outflows to the Indio Subbasin from the updated San Gorgonio model will be shared with Coachella Valley Water District and Todd Groundwater as part of this collaborative effort.

The study will also include a review of the conceptual model for this boundary, incorporating new datasets collected since the development of the San Gorgonio Subbasin Groundwater Model Framework. Based on this conceptual review and discussions with Todd Groundwater, recommendations will be developed for refinements to the numerical models of the San Gorgonio and/or Indio Subbasins to ensure consistency in their representation of underflows.

The scope for Task 1 is subdivided into five subtasks listed below.

#### 1.1 Review of background materials on hydrogeologic conditions

This subtask includes reviewing existing hydrogeologic studies, groundwater models, and previous boundary flow analyses for the San Gorgonio and Indio Subbasins. Data sources will include regulatory reports, historical monitoring data, and newly available datasets.

#### 1.2 Model Evaluation and Comparison along Boundary

The groundwater models for both subbasins will be analyzed to assess how boundary conditions impact subsurface flow. Model assumptions, calibration data, and sensitivity to boundary conditions will be evaluated to identify potential discrepancies and areas for refinement.

#### 1.3 <u>Develop and Test Recommendations for Underflow Coordination</u>

Using findings from Subtask 1.2, refinements to boundary conditions will be developed and tested within the numerical models to improve consistency in underflow representation. Recommendations will be documented for implementation in future modeling efforts. Accepted refinements will be integrated into the Subbasin groundwater modeling framework and incorporated into the Task 1 modeling subtasks.

#### 1.4 Meetings and Communication with SPGWA and Indio Subbasin

Subtask 1.4 includes time for meeting with SGPWA and Indio Subbasin. This meeting is intended to communicate updates on the study and present key findings and recommendations. INTERA assumes 1 meeting will be included with SGPWA and Indio Subbasin as a part of Subtask 1.4.



#### 1.5 Meetings with Todd Groundwater

Subtask 1.5 includes time for preparing and meeting with Todd Groundwater to discuss results and resolve issues between the different models. INTERA assumes up to 3 meetings with Todd Groundwater for this Subtask.

#### 1.6 Internal Project Management and Meetings

Subtask 1.6 comprises INTERA's internal meetings and project management used to manage Task 1.

#### **Budget**

The level of effort and budget for the above scope are detailed below in Table 1. The estimated budget for the above task is \$30,826.

Table 1

	Task	Expected	Labor Categories/Hours				
Task	Description	Duration	Principal I	Sr. Eng III	Eng/Sci II	Eng/Sci III	Task Budget
1.1	Background Review	2 weeks	2	8	8		\$ 4,170
1.2	Model Boundary Review	2 weeks	8	8	8		\$ 6,264
1.3	Develop & Test Recommend ations		4	16		16	\$ 8,068
1.4	Meetings with SGPWA & Indio		4	8			\$ 3,308
1.5	Meetings with Todd Groundwater		6	12			\$ 4,962
1.6	Project Management		4	8	2	2	\$ 4,054
						Total	\$ 30,826

Task 2: Coordination on Study on Underflows between San Gorgonio Pass Subbasin and Beaumont Basin

Similar to Task 1, Task 2 supports a study to better understand the hydrogeologic boundary between the San Gorgonio Pass Subbasin and the Beaumont Basin. The study will review the hydrogeologic data and



compare model boundary conditions that influence the subsurface flow from the Beaumont Basin to the San Gorgonio Pass Subbasin. The study will also include a conceptual model review of this portion of the Subbasin using new datasets collected since the development of the San Gorgonio Subbasin Groundwater Model Framework. Based on this conceptual review, recommendations will be developed for refinements of the San Gorgonio Pass Subbasin and/or Beaumont Basin models to have consistent underflows between the two models.

The scope for Task 2 is subdivided into six subtasks listed below.

- 2.1 Review of background materials on hydrogeologic conditions
- 2.2 Model Evaluation and Comparison along Boundary
- 2.3 <u>Develop and Test Recommendations for Underflow Coordination</u>
- 2.4 Meetings and Communication with SGPWA and Beaumont Basin

Subtask 2.4 includes time for meeting with representatives from SGPWA and Beaumont Basin Watermaster. This meeting is intended to communicate updates on the study and present key findings and recommendations. INTERA assumes 1 meeting will be included with SGPWA and Beaumont Basin Watermaster as a part of Subtask 2.4.

2.5 Meetings with Thomas Harder & Co

Subtask 2.5 includes time for preparing and meeting with Thomas Harder & Co (TH&Co) to discuss results and resolve issues between the different models. INTERA assumes up to 3 meetings with TH&Co for this Subtask.

2.6 Internal Project Management and Meetings

Subtask 2.6 comprises INTERA's internal meetings and project management used to manage Task 2.

#### **Budget**

The level of effort and budget for the above scope are detailed below in Table 2. The estimated budget for the above task is \$40,792.



Table 2

	Task	Expected	Labor Categories/Hours					
Task	Description	Duration	Principal I	Sr. Eng III	Eng/Sci II	Eng/Sci III	Та	isk Budget
2.1	Background Review	2 weeks	4	8	8		\$	4,868
2.2	Model Boundary Review	2 weeks	8	8	12	16	\$	9,892
2.3	Develop & Test Recommend ations		12	16		32	\$	13,708
2.4	Meetings with SGPWA & Beaumont		4	8			\$	3,308
2.5	Meetings with TH&Co		6	12			\$	4,962
2.6	Project Management		4	8	2	2	\$	4,054
Total \$ 40,792						40,792		



#### Summary

The total budget for the combined tasks supporting a better understanding of the boundary conditions between the Beaumont Basin, San Gorgonio Pass Subbasin, and the Indio Subbasin is \$71,618.

INTERA appreciates SGPWA's efforts to further develop a thorough understanding of their hydrogeologic boundaries. We believe this effort will be productive in supporting sustainable management of the San Gorgonio Pass Subbasin and promoting coordination with the bordering subbasins. INTERA hopes that SGPWA will support our proposed path forward for supporting these studies regarding underflow conditions.

Please do not hesitate to call or email us if there are any questions or additional information is needed on this scope of work.

Sincerely,

**INTERA** Incorporated

Abhishek Singh, PhD, PE

Alish SD

Principal Engineer, Project Manager

President – Water Supply & Water Resources LOB

**INTERA Incorporated** 

Nathan Hatch

Hydrologist, Lead Modeler

**INTERA** Incorporated



#### **Letter of Agreement**

May 5, 2025

Lance Eckhart, General Manager San Gorgonio Pass Water Agency 1210 Beaumont Avenue Beaumont, CA, 92223

Re: <u>Collaboration and Cost Sharing for Professional Services for San Gorgonio Pass Inter-Basin</u>
<u>Coordination to Support Underflow Studies</u>

Attachment: Provost & Pritchard Consulting Group Proposal

This letter of agreement ("Agreement") serves as an agreement between the Desert Water Agency (DWA) and San Gorgonio Pass Water Agency (SGPWA) (collectively "Agencies" and in the singular, "Agency") for collaboration and cost sharing of the following activity required to comply with the Sustainable Groundwater Management Act (SGMA) and the recommended corrective actions put forth by the California Department of Water Resources during the 2022 Periodic Review of the SGMA Alternative Plan Update for the Indio Subbasin:

Task 1: Coordination on study of underflows between the San Gorgonio Pass and Indio Subbasins, including review of background materials on hydrogeologic conditions, model evaluation and comparison along the subbasin boundary, developing and testing recommendations for underflow coordination, meetings and communication with SGPWA and Indio Subbasin, meetings with the Indio Subbasin consultant (Todd Groundwater), and internal project management and meetings.

For the purposes of this agreement, Provost & Pritchard Consulting Group, in coordination with INTERA, was selected through a competitive process to be the consultants responsible for maintaining SGMA compliance in the San Gorgonio Pass Subbasin, including any necessary coordination with adjacent subbasins.

For this activity, it is agreed that each Agency will have the opportunity to review and provide comments on the contract and all deliverables associated with Task 1 and to participate in all meetings, as stated in the proposal dated April 4, 2025, submitted by Provost & Pritchard Consulting Group. Each Agency will be provided with an electronic copy of any draft and final reports and/or technical memorandums produced as part of this task.

The proposal (attached) by Provost & Pritchard Consulting Group, in coordination with INTERA, to perform work associated with Task 1 is \$43,694. Fees will not exceed this estimate without additional authorization by both SGPWA and DWA. Each Agency agrees to pay one-half (1/2) of the cost to perform work associated with Task 1: Coordination on Study on Underflows between San Gorgonio Pass and Indio Subbasins. SGPWA will be the Agency administering the contract with Provost & Pritchard Consulting Group and will pay invoices per the terms of the contract with Provost & Pritchard Consulting Group. SGPWA will invoice DWA for reimbursement of its one-half (1/2) share of the contract amount as reflected

in invoic	es received	from Provost &	& Pritchard	Consulting	Group	from	time to	time f	for work	associ	iated
with Tasl	k 1 in the at	tached proposal	. Invoices	submitted to	o DWA	shall	be due a	and ow	ving with	nin 30	days
from the	date of the i	nvoice submitte	ed by SGPV	VA.							

Either Agency may withdraw from this Agreement at any time, for any reason or no reason, upon prior written notice to the other Agency. If an Agency withdraws from this Agreement, the withdrawing Agency will be responsible for its share of the total cost of work contracted for, and/or initiated by, the Agencies prior to the date of the written notice of withdrawal.

Sincerely,		
Steve L. Johnson		
General Manager		
Desert Water Agency		

#### ACCEPTED AND AGREED TO

This letter will constitute our agreement to the preceding terms. If this arrangement is acceptable to you on behalf of your agency, please acknowledge your agreement by signing the letter and returning a copy to us. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

	Date:	
Lance Eckhart		
General Manager		
San Gorgonio Pass Water Agency		

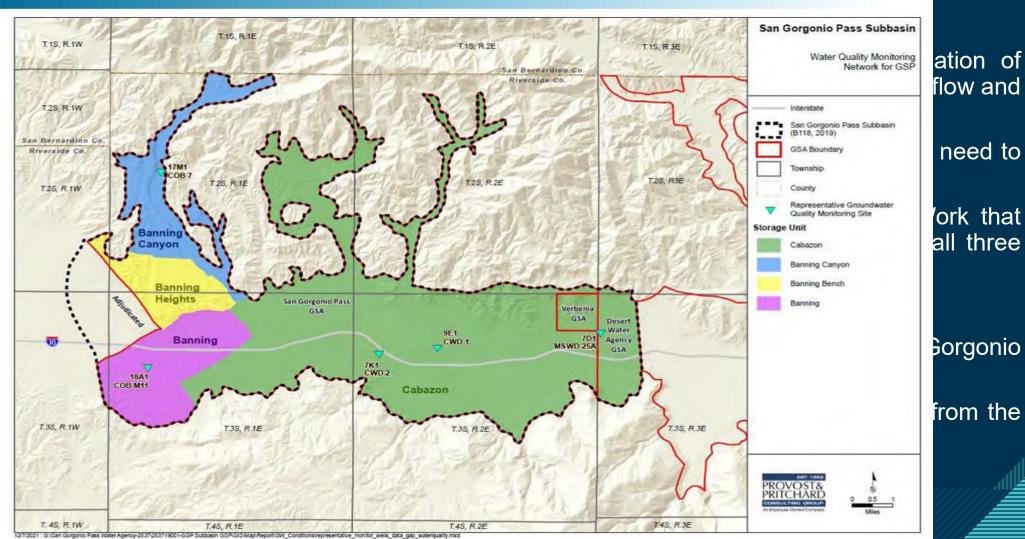
## Interbasin Underflow Coordination Studies Between the Beaumont Basin, San Gorgonio Pass, and Indio Subbasins

May 5, 2025

### Interbasin Coordination Studies

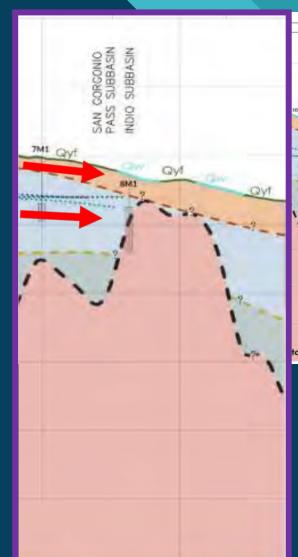
San Gorgonio Pass Groundwater Sustainability Plan Chapter Four Sustainable Management Criteria

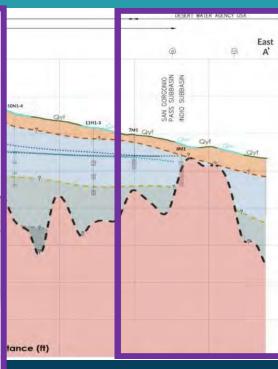
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### Groundwater Underflows Task 1 Indio Subbasin - San Gorgonio Pass Subbasin

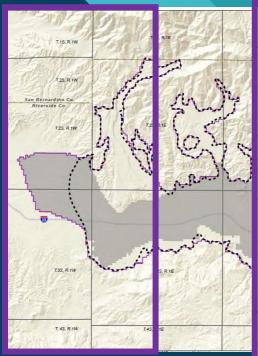
- Compare model boundary conditions that can influence subsurface flow in the SGP Subbasin model vs. the Indio Subbasin model
- Review of conceptual model using newly available data and information (since SGP Model was developed in 2019)
- Coordinate with Indio Subbasin agencies and consultants to share analysis interpretations
- Outcome: Recommendations to the Indio & SGP Subbasin GSAs on improvements to the underflow representation under historical and future conditions

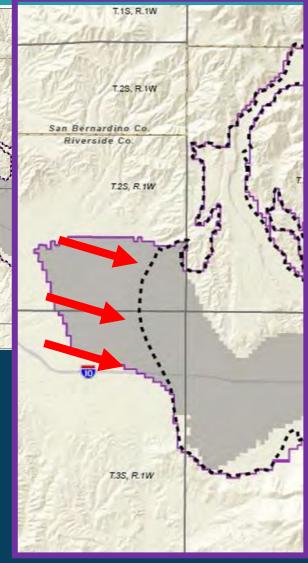




# Groundwater Underflows Task 2 Beaumont Basin - San Gorgonio Pass Subbasin

- Compare model boundary conditions that can influence subsurface flow in the SGP Subbasin model vs. the Beaumont Basin's model
- Coordinate with Beaumont Basin representatives and consultant to share analysis interpretations
  - SGP GSA to be primary SGP representation involved
- Outcome: Recommendations to the Beaumont Basin & SGP Subbasin GSAs on improvements to the underflow representation under historical and future conditions





### Interbasin Coordination Studies Cost

- Total Proposal Cost: \$99,995
- Desert Water Agency is participating in a 50/50 cost share on Task 1, as they are also a member of the Indio Subbasin GSA
- This 50/50 cost share on Task #1 brings the total cost to the Agency of \$78,148

Task No.	Task Name	Budget
1	Coordination with the Indio Subbasin	\$43,694
2	Coordination with the Beaumont Basin Watermaster	\$56,301
Total		\$99,995

### Staff Recommendation

• Authorize the General Manager to enter into a professional services agreement with Provost & Pritchard Consulting Group, including their subconsultant INTERA, to perform interbasin underflow coordination studies for a total not-to-exceed amount of \$99,995.

# Questions