GSP Coordination Committee

Coordination Committee Meeting – April 26, 2021

Meeting will begin at 1:15 pm – thank you for joining us!

Merced Irrigation-Urban GSA
Merced Subbasin GSA
Turner Island Water District GSA-1

Image courtesy: Veronica Adrover/UC Merced

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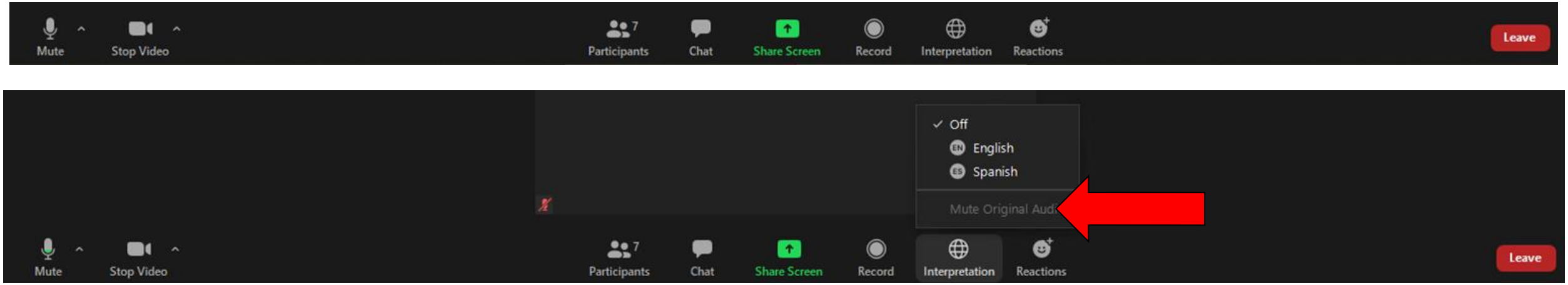
Welcome, Instructions for Zoom
Bienvenidos, Instrucciones para Zoom

We have two language audio channels available. English only speakers, please select English.

Si solamente habla español, debe seleccionar un canal de idioma



The meeting will have simultaneous interpreting, so you are welcome to comment in your native language.
La junta será interpretada simultáneamente, así que le invitamos a que haga comentarios en su lenguaje nativo.

Agenda

1. Call to Order
2. Roll Call
3. Consent Calendar
   a) Approval of February 22, 2021 Meeting Minutes
4. Public Comment
5. Reports
   a) Current Basin Conditions
   b) Coordination with Neighboring Basins
   c) GSA Reports
6. Discussion Items
   a) Stakeholder Advisory Committee Update
   b) Data Gaps Plan
   c) Meadowbrook Intertie Feasibility Study
7. Next Steps and Adjourn

Image courtesy: Veronica Adrover/UC Merced

Roll Call

Representative	GSA
Hicham ElTal	Merced Irrigation-Urban GSA
Stephanie Dietz	Merced Irrigation-Urban GSA
Justin Vinson	Merced Irrigation-Urban GSA
Daniel Chavez	Merced Irrigation-Urban GSA
Ken Elwin *(alternate)*	Merced Irrigation-Urban GSA
Mike Gallo	Merced Subbasin GSA
Nic Marchini	Merced Subbasin GSA
Eric Swenson	Merced Subbasin GSA
George Park *(alternate)*	Merced Subbasin GSA
Larry Harris	Turner Island Water District GSA #1
Scott Skinner *(alternate)*	Turner Island Water District GSA #1

Image courtesy: Veronica Adrover/UC Merced

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Approval of Minutes

Image courtesy: Veronica Adrover/UC Merced

Questions/Comments from Public:

If you would like to make a comment, please type the comment in the Q&A or raise your hand to request to be taken off mute

Image courtesy: Veronica Adrover/UC Merced

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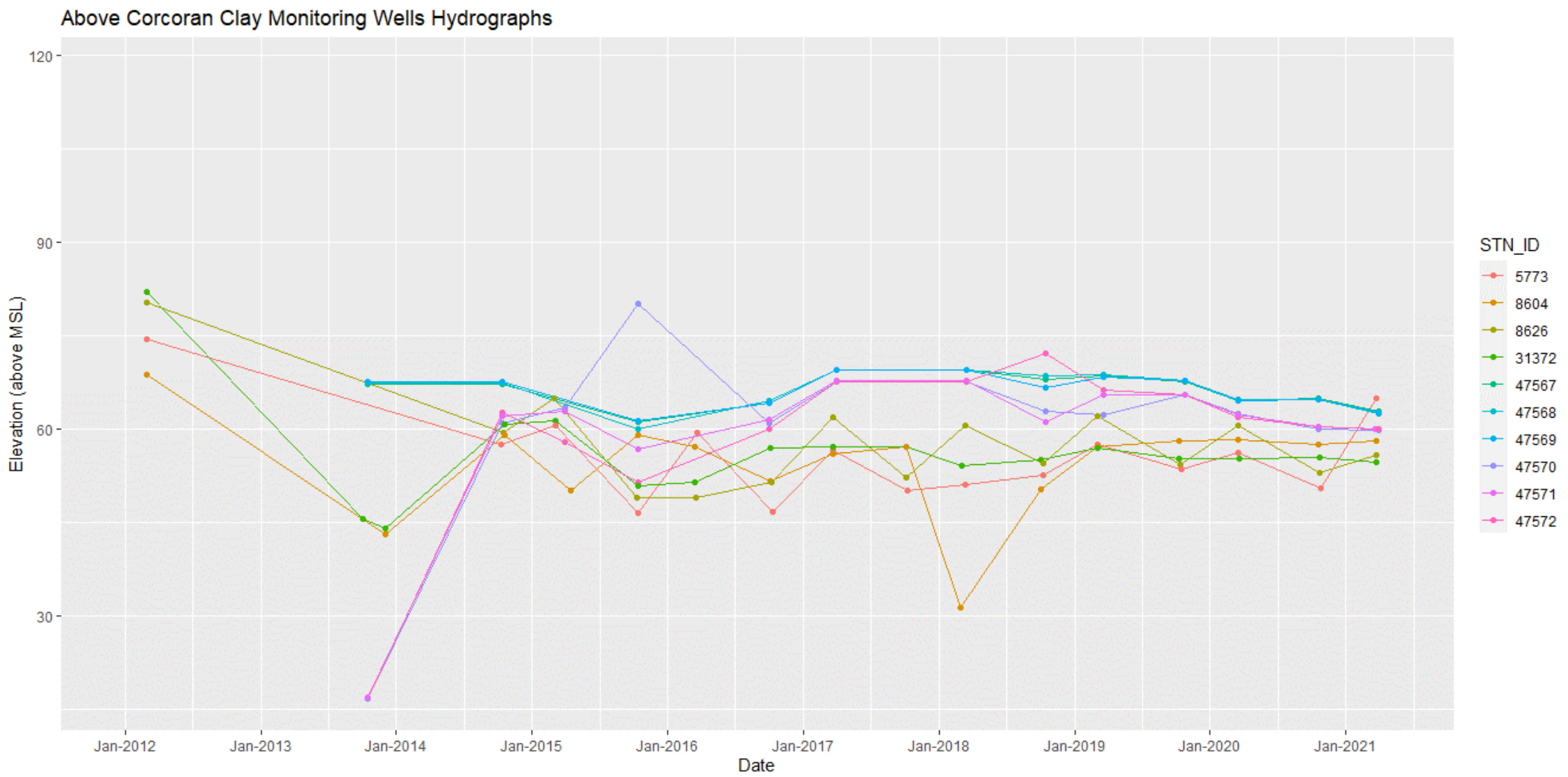
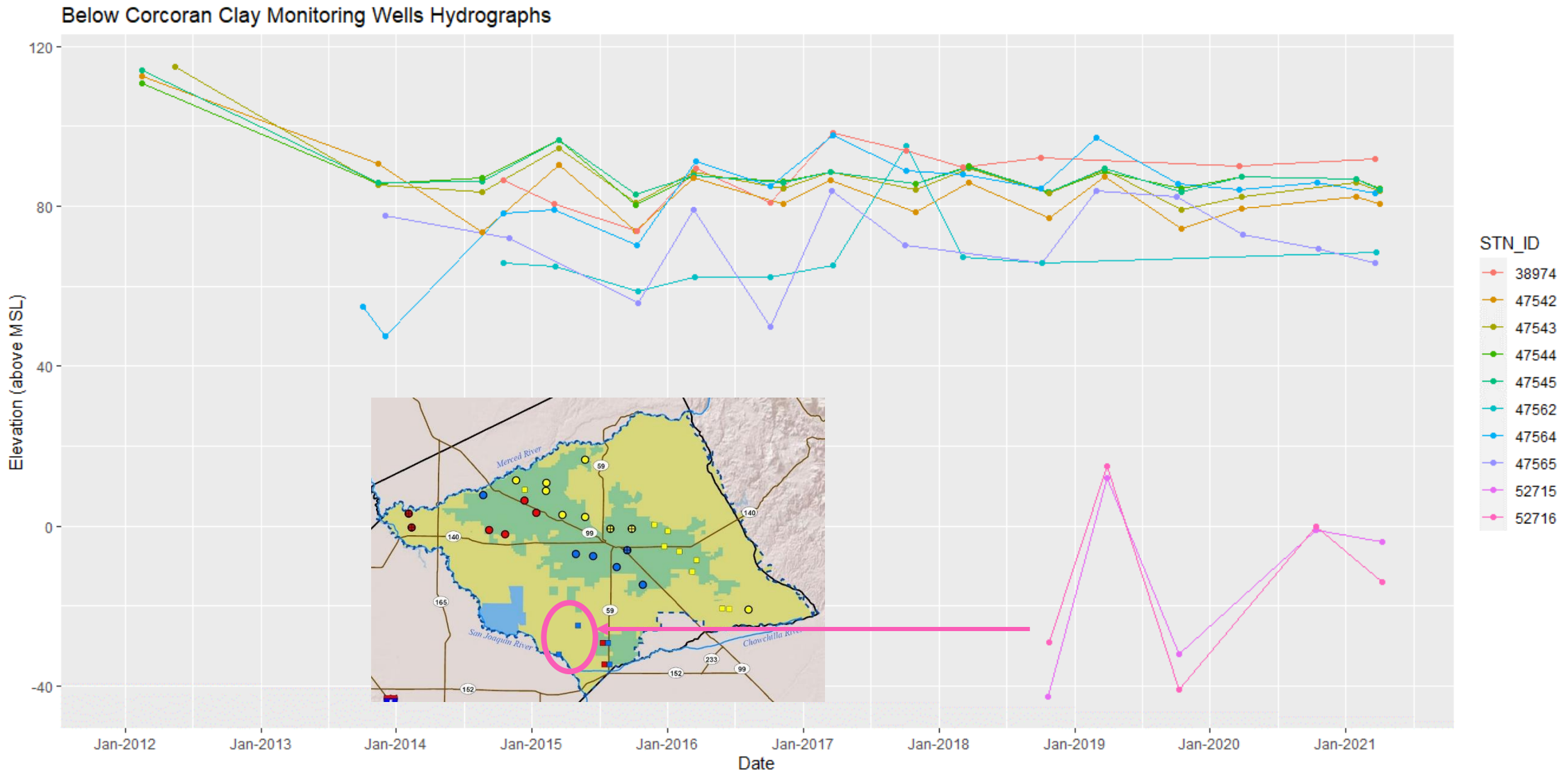
Reports

Image courtesy: Veronica Adrover/UC Merced

Current Basin Conditions – Spring 2021 measurements



Current Basin Conditions – Spring 2021 measurements



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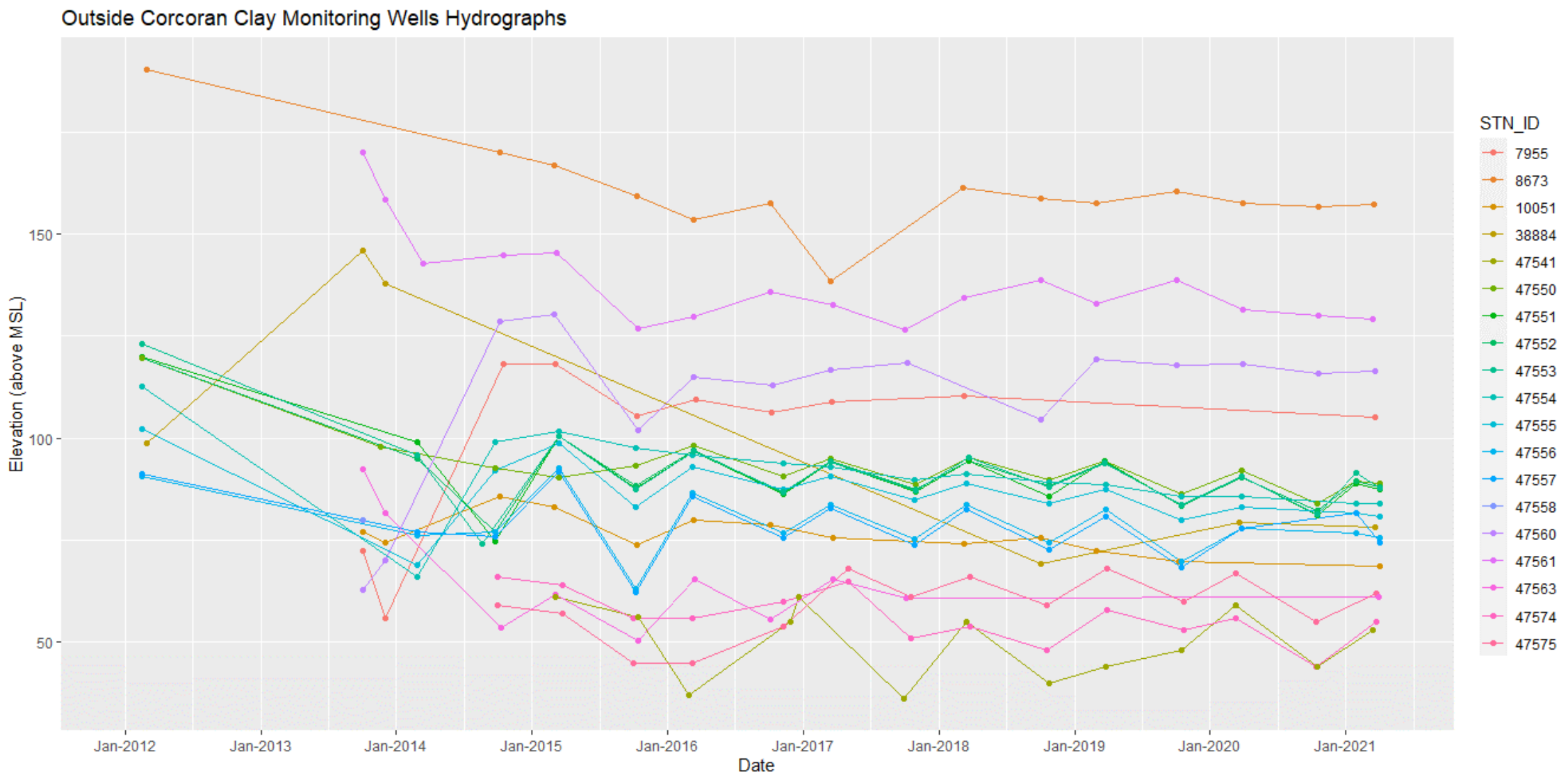
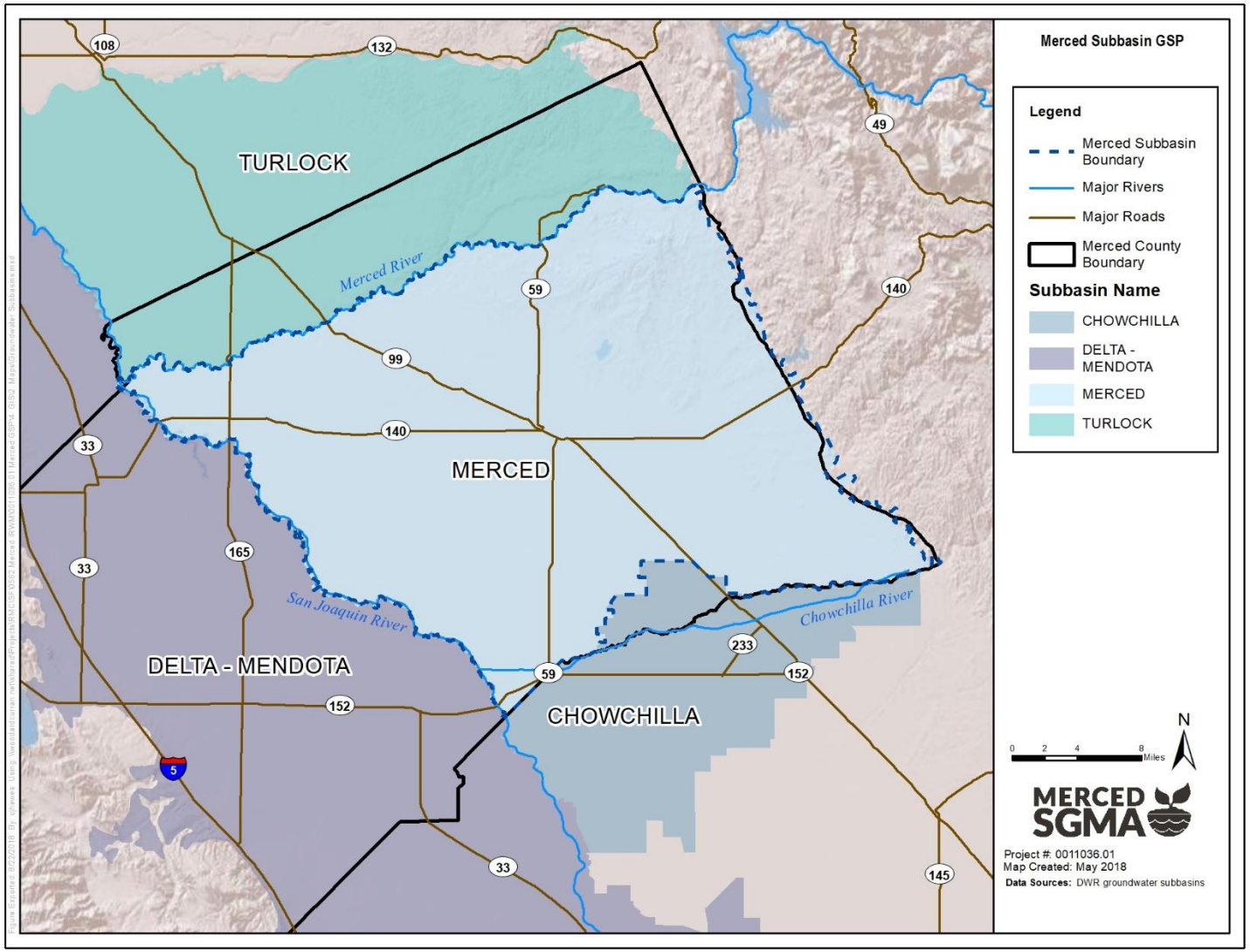


Coordination with Neighboring Basins



GSA Reports

- Updates from each GSA on activities they are undertaking in their own jurisdiction:
  - Merced Subbasin GSA
  - Merced Irrigation-Urban GSA
  - Turner Island Water District GSA #1

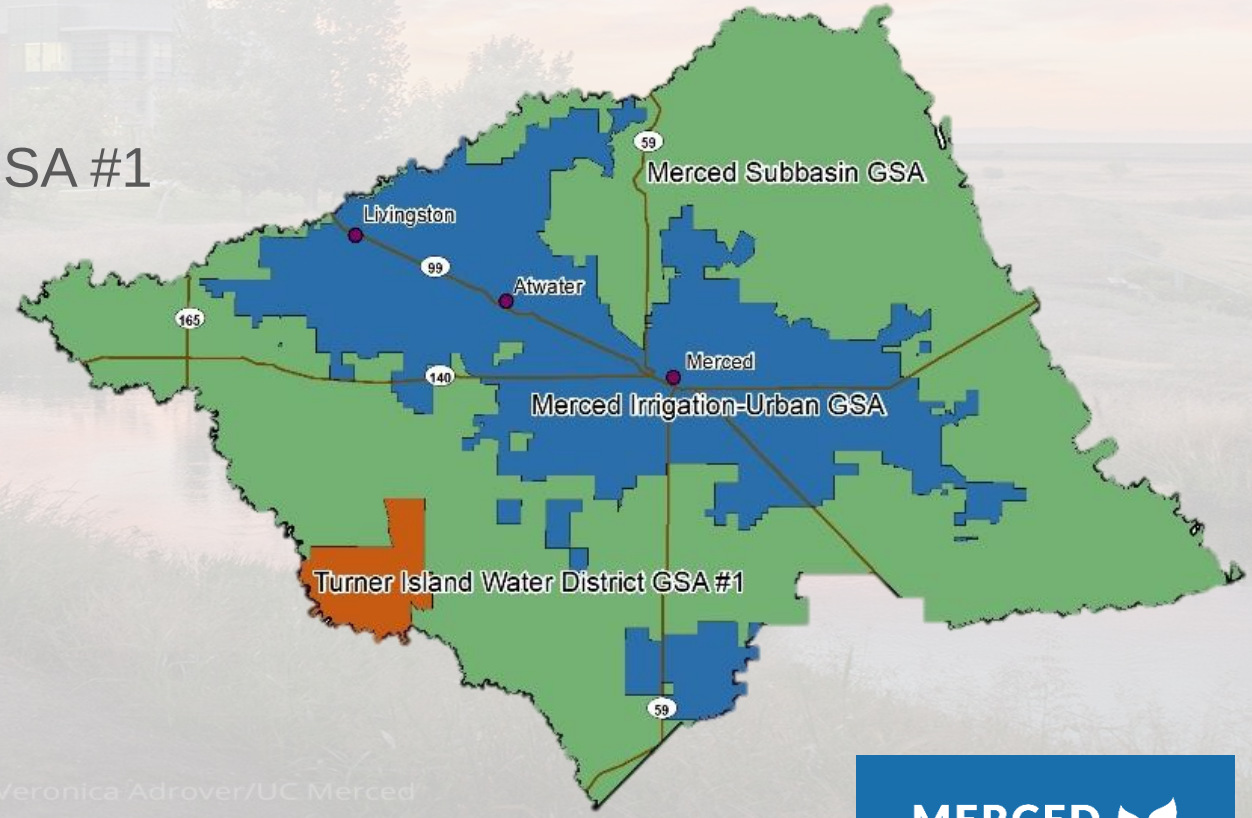


Image courtesy: Veronica Adrover/UC Merced

Discussion Items

Image courtesy: Veronica Adrover/UC Merced

Stakeholder Advisory Committee Update

Image courtesy: Veronica Adrover/UC Merced

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Stakeholder Advisory Committee Update

- April 12 – first meeting of newly updated committee
- 25 of 30 stakeholders able to attend
- Good engagement from the group
- Key topics discussed:
  - GSP highlights and commitments
  - Implementation progress
  - Water Year 2020 Annual Report
  - Data Gaps Plan
- Next meeting early July – a few weeks ahead of Coordination Committee

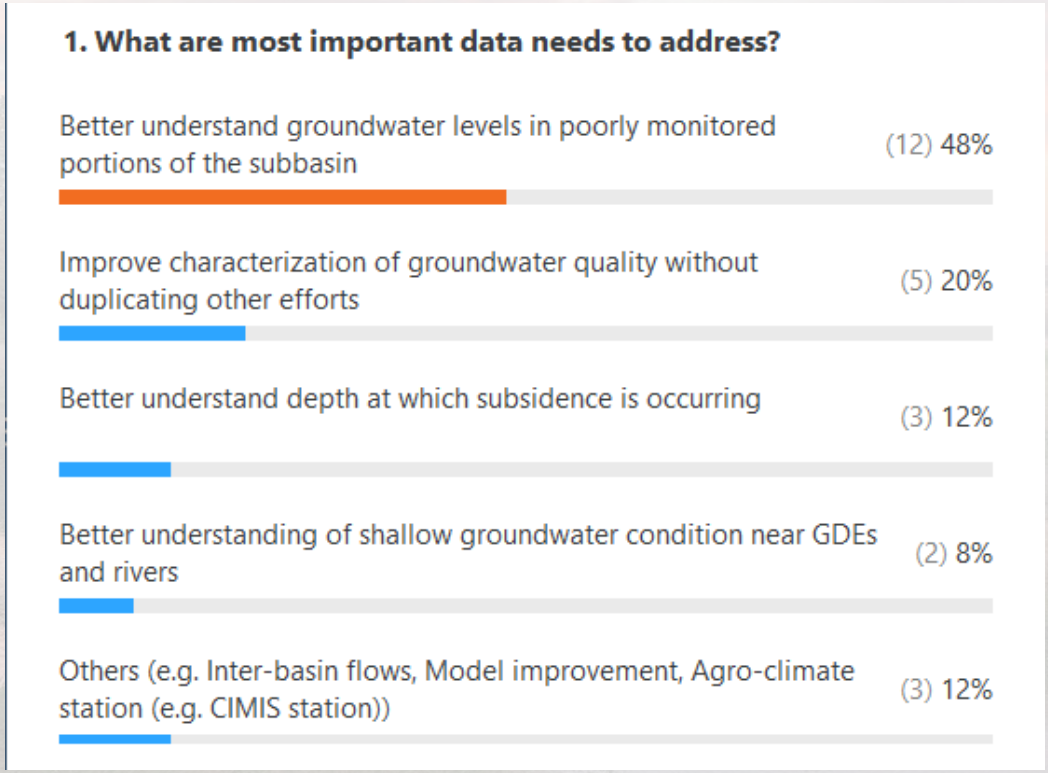


Image courtesy: Veronica Adrover/UC Merced

Data Gaps Plan

Image courtesy: Veronica Adrover/UC Merced

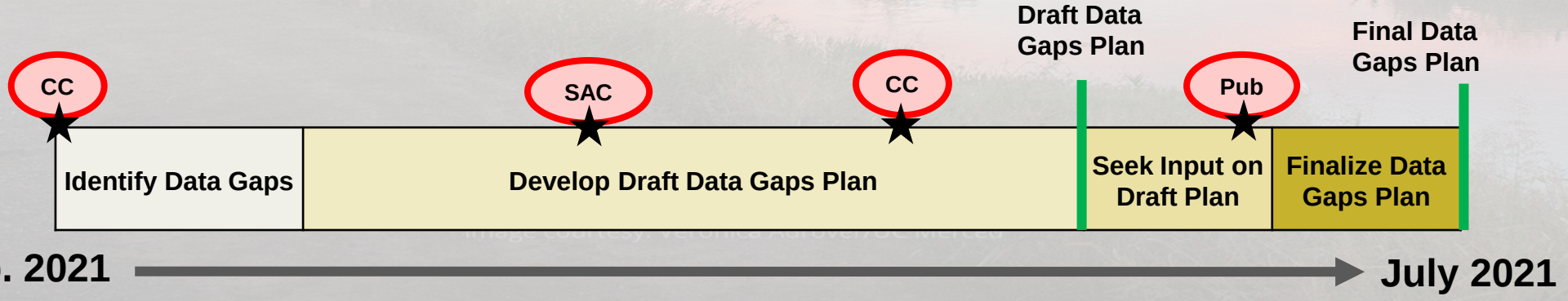
Purpose & Goal

- **Purpose –** Improve scientific understanding of subbasin to support ongoing basin management and policy making
- **Goal –** Develop a plan that identifies and ranks priority areas for the installation of monitoring wells or subsidence monitoring stations to support basin characterization and future GSP refinement.

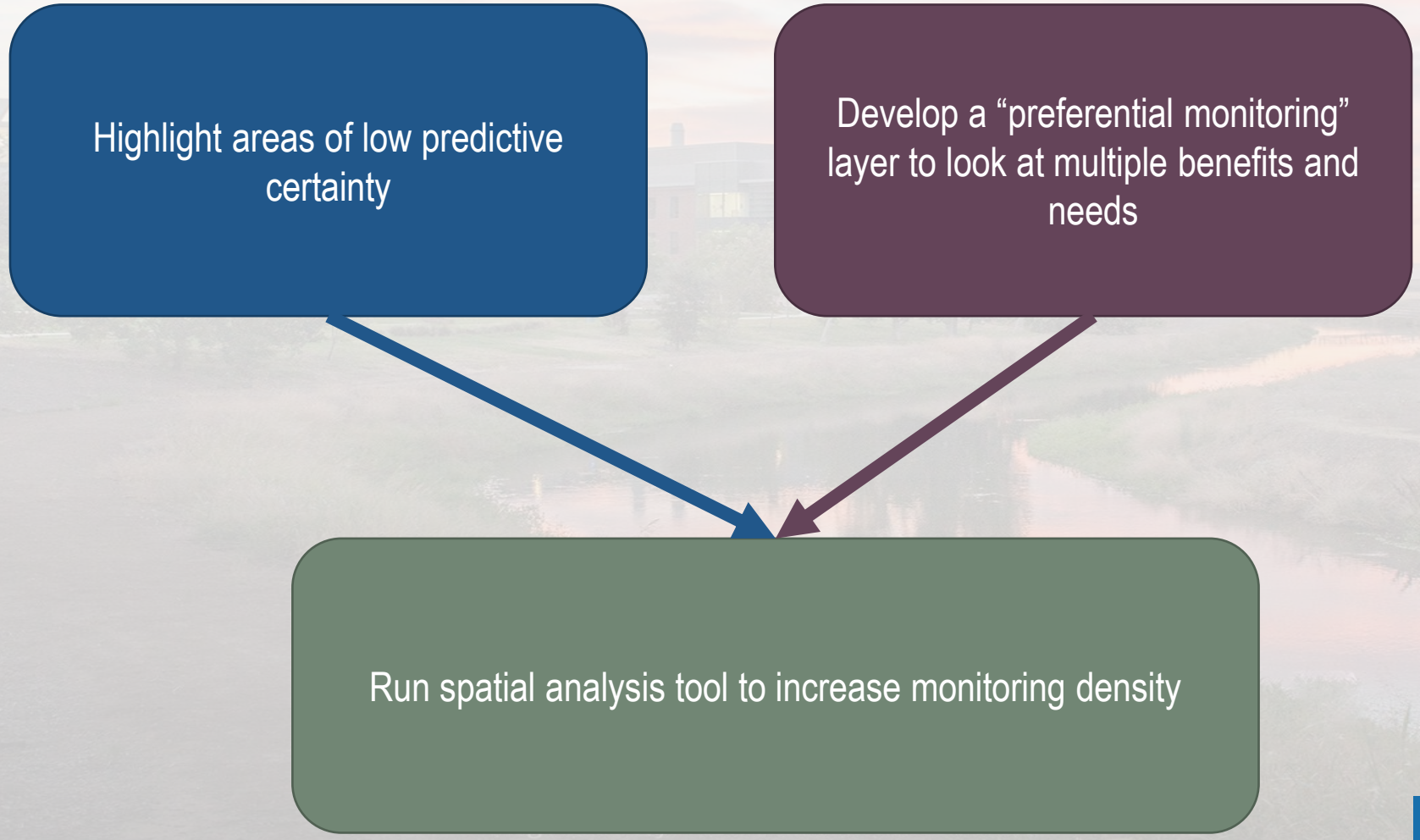
Image courtesy: Veronica Adrover/UC Merced

Data Gaps Plan – Schedule

1. **Coordination Committee Meeting – Feb. 22**
   - Background, Prioritization, and Ranking Methodology
2. **Stakeholder Advisory Committee Meeting – Apr. 12**
   - Background, Prioritization, and Ranking Methodology
3. **Coordination Committee Meeting – Apr. 26**
   - Present Approach and Recommendations
4. **Write up draft plan in May and release for review and comment late May**
5. **Public Meeting – June**
   - Present draft Plan and collect feedback before finalizing in July

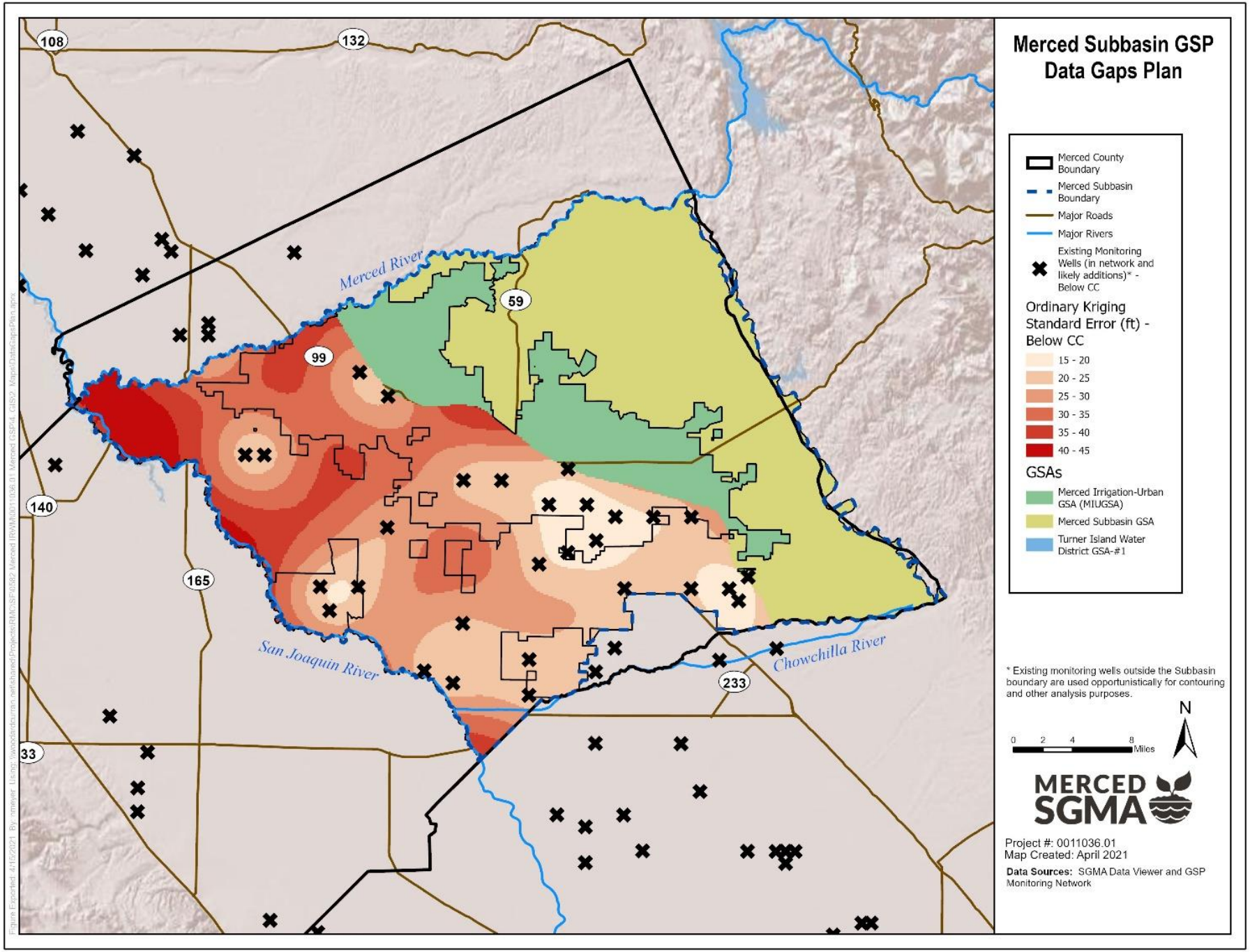


Data Gaps Tool Overview



Highlight areas of low predictive certainty

- Uncertainty in interpolated groundwater estimates: ordinary kriging standard error



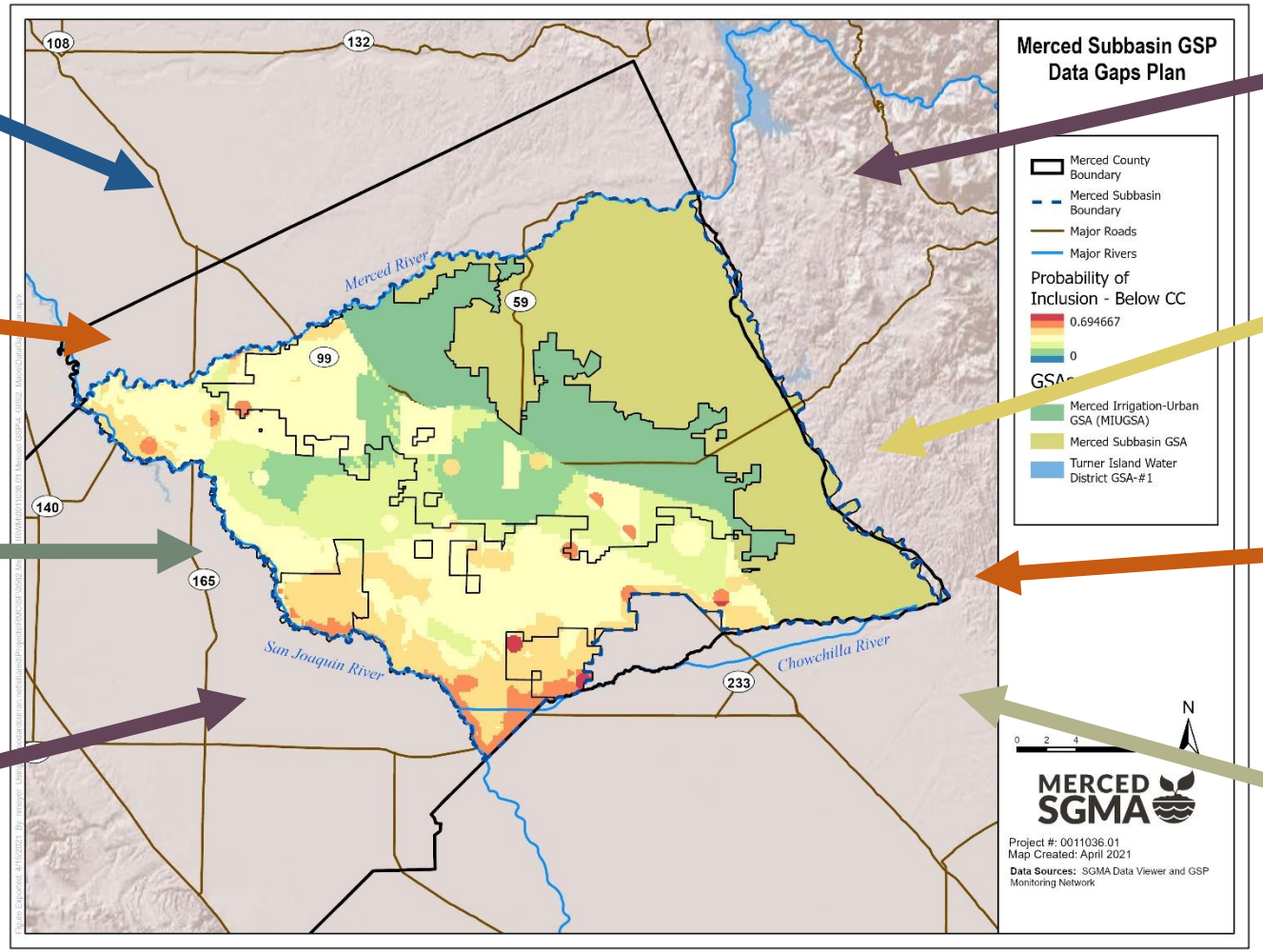
Develop a “preferential monitoring” layer to look at multiple benefits and needs

Existing Well Tiering Rank

Depth to Groundwater

Distance to Streams

Water Quality



Subsidence
*Below and Outside CC

Distance to Subbasin Boundary

Natural Communities Commonly Associated with Groundwater
*Above and Outside CC

Disadvantaged Communities

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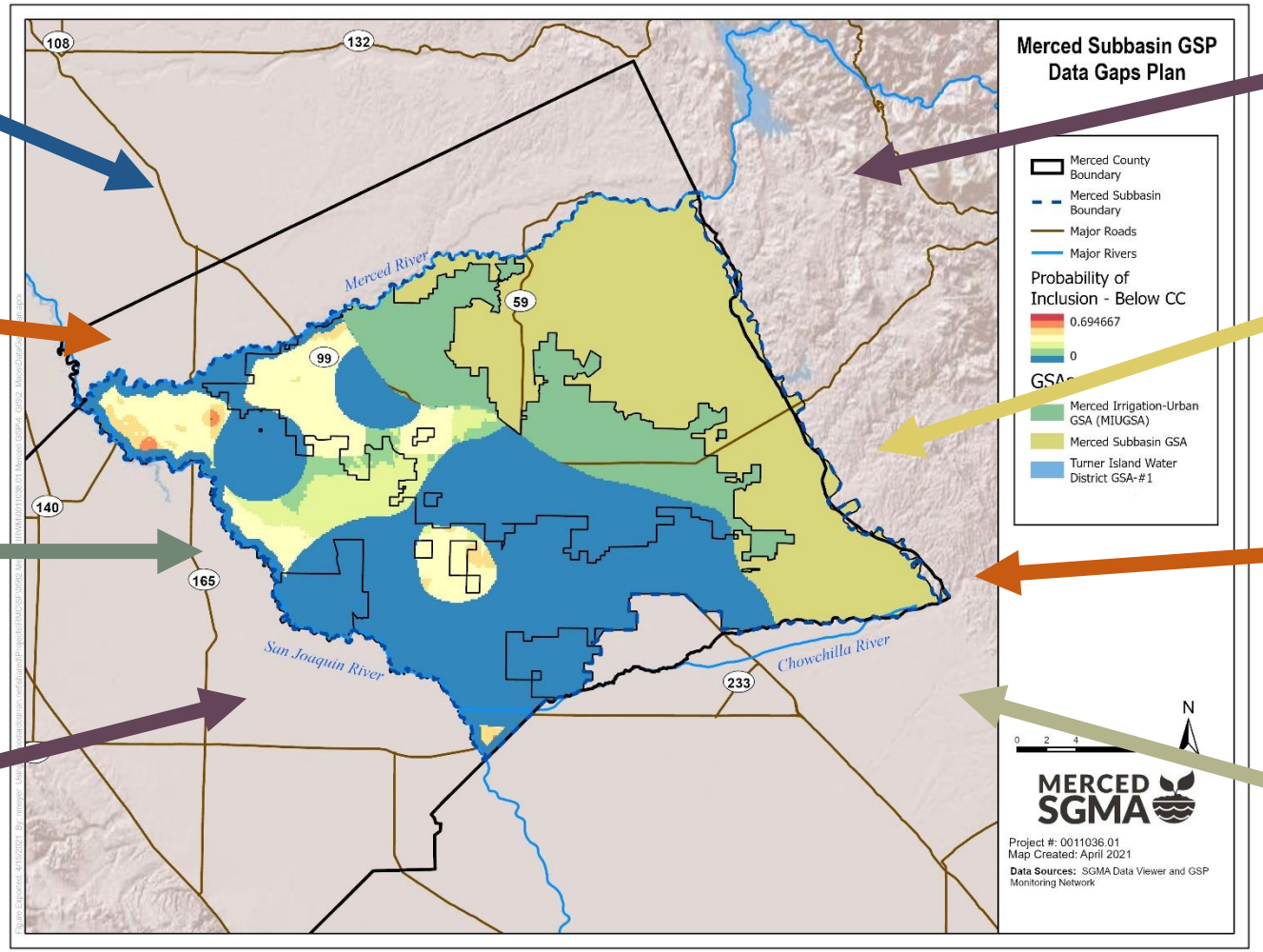

Subsidence
*Below and Outside CC

Distance to Subbasin Boundary

Natural Communities Commonly Associated with Groundwater
*Above and Outside CC

Disadvantaged Communities

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Determine how many additional wells needed

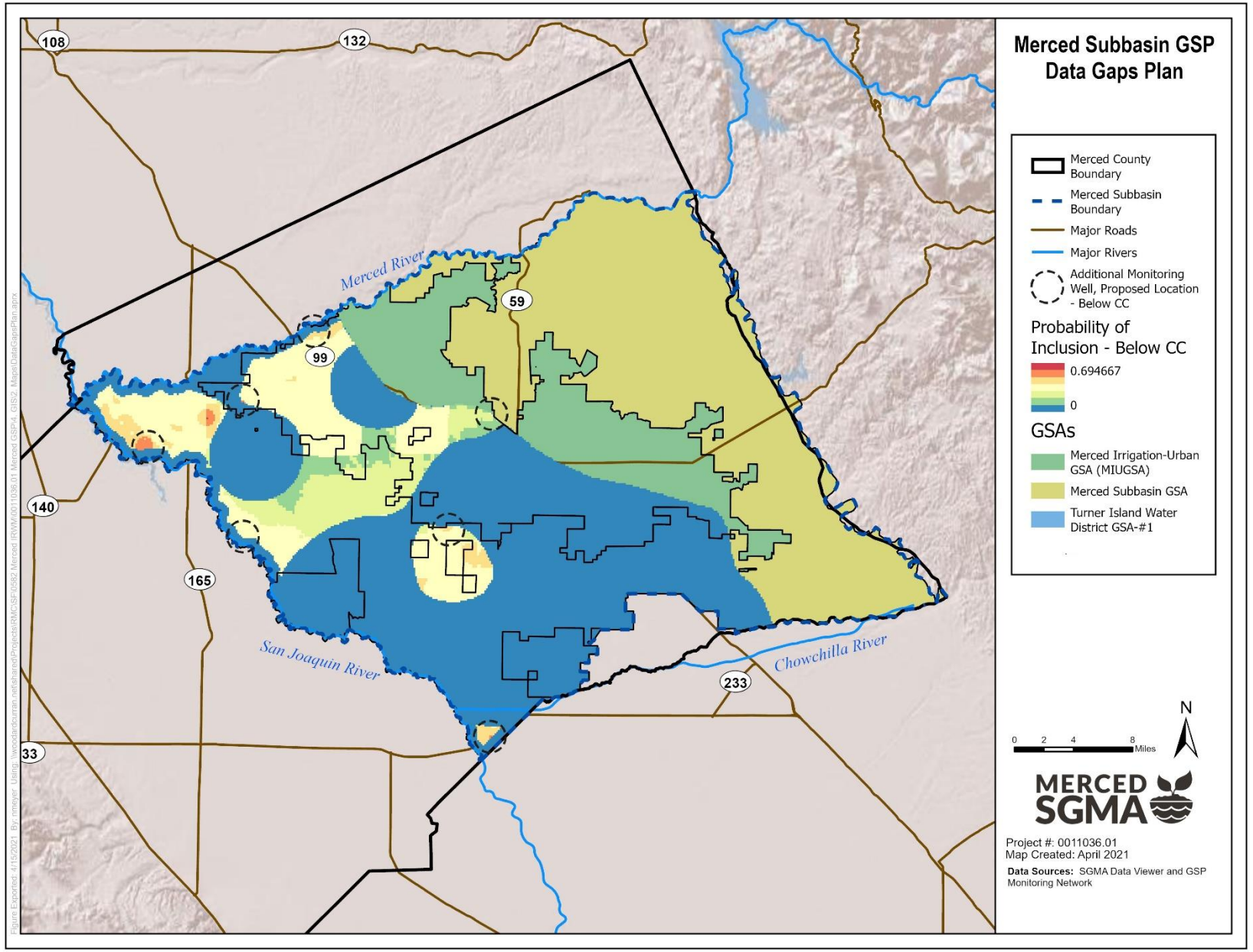
Aquifer	Number of Existing Wells within Subbasin	Aquifer Area (sq. mi.)	Existing Aquifer Area with 4+ wells / 100 sq. mi.	Number of Additional Wells Needed to Reach 4+ wells / 100 sq. mi.
Below CC	31	438	263	7
Above CC	14	438	91	14
Outside CC	30	364	185	8

Assumptions

- 4+ wells per 100 sq. mi. guideline based on DWR BMP
- Proposed number of new wells assumes even distribution
- Assumes wells in SGMA Data Viewer with Fall 2020 monitoring data will be added to network if not already included
- Assumes adding some existing wells in TIWD GSA-#1 to monitoring network
- Already incorporates newly installed monitoring wells in El Nido, Planada, and City of Merced (UC Merced region)

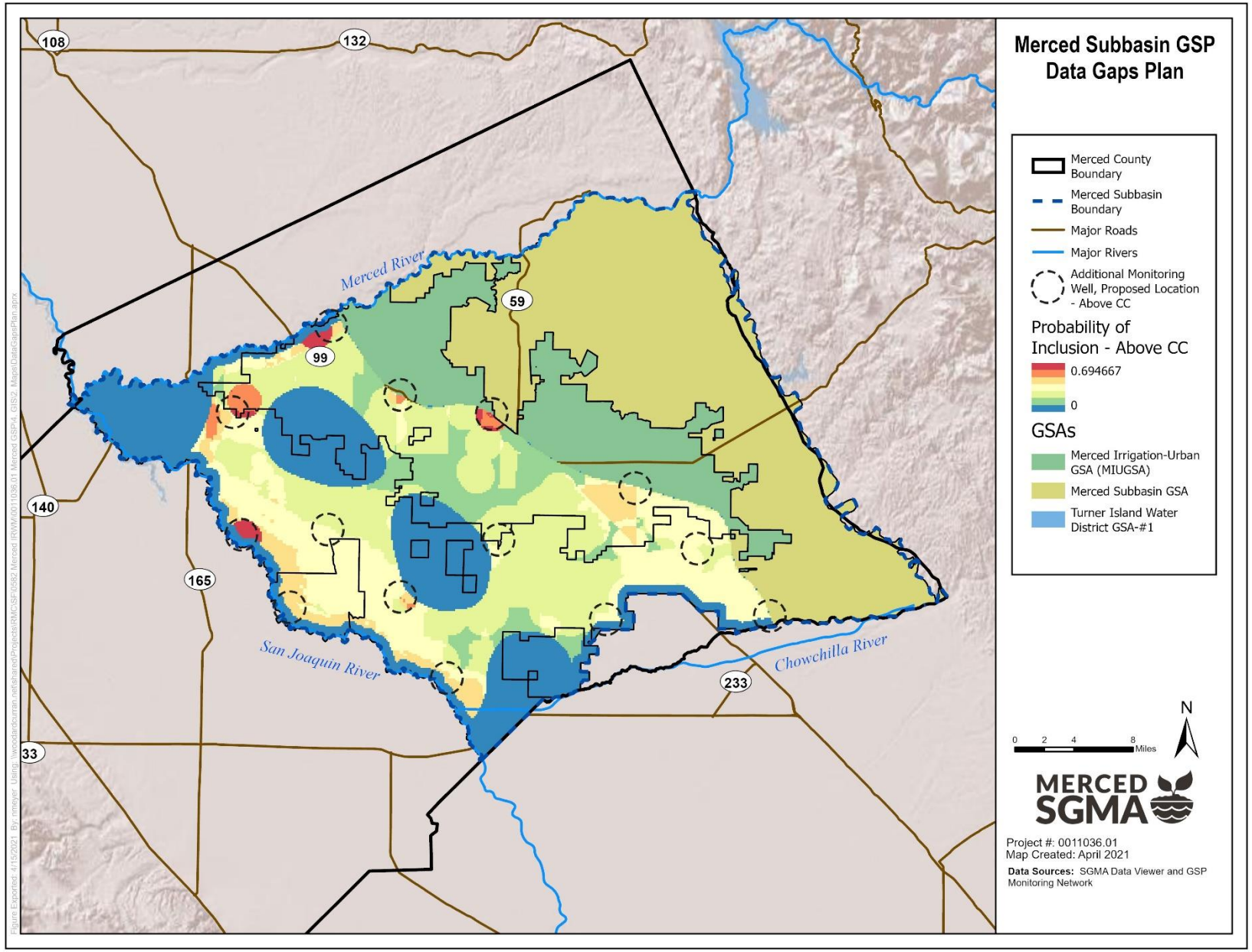
Image courtesy: Veronica Adrover/UC Merced

Run spatial analysis tool to increase monitoring density: Below Corcoran Clay

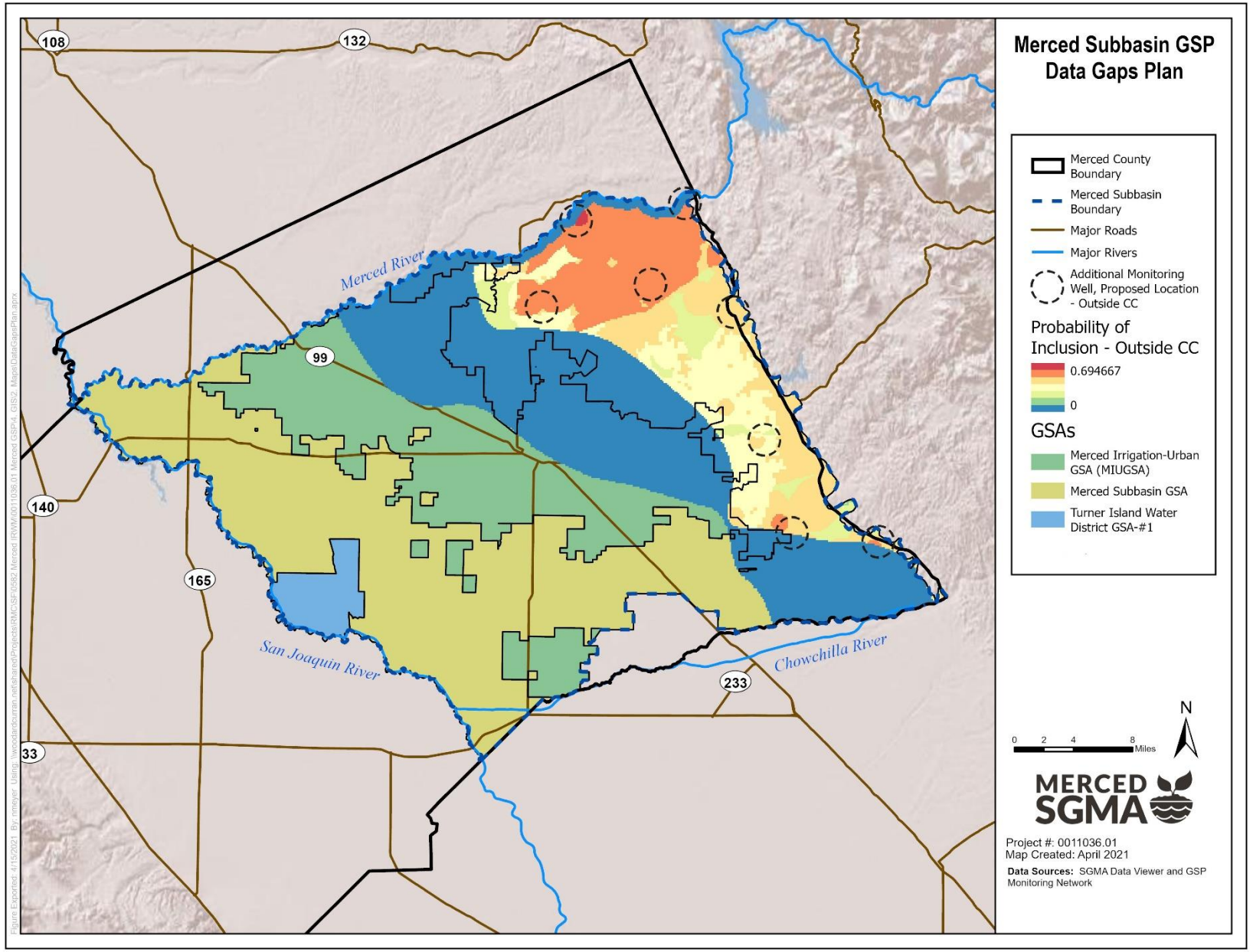


Run spatial analysis tool to increase monitoring density:

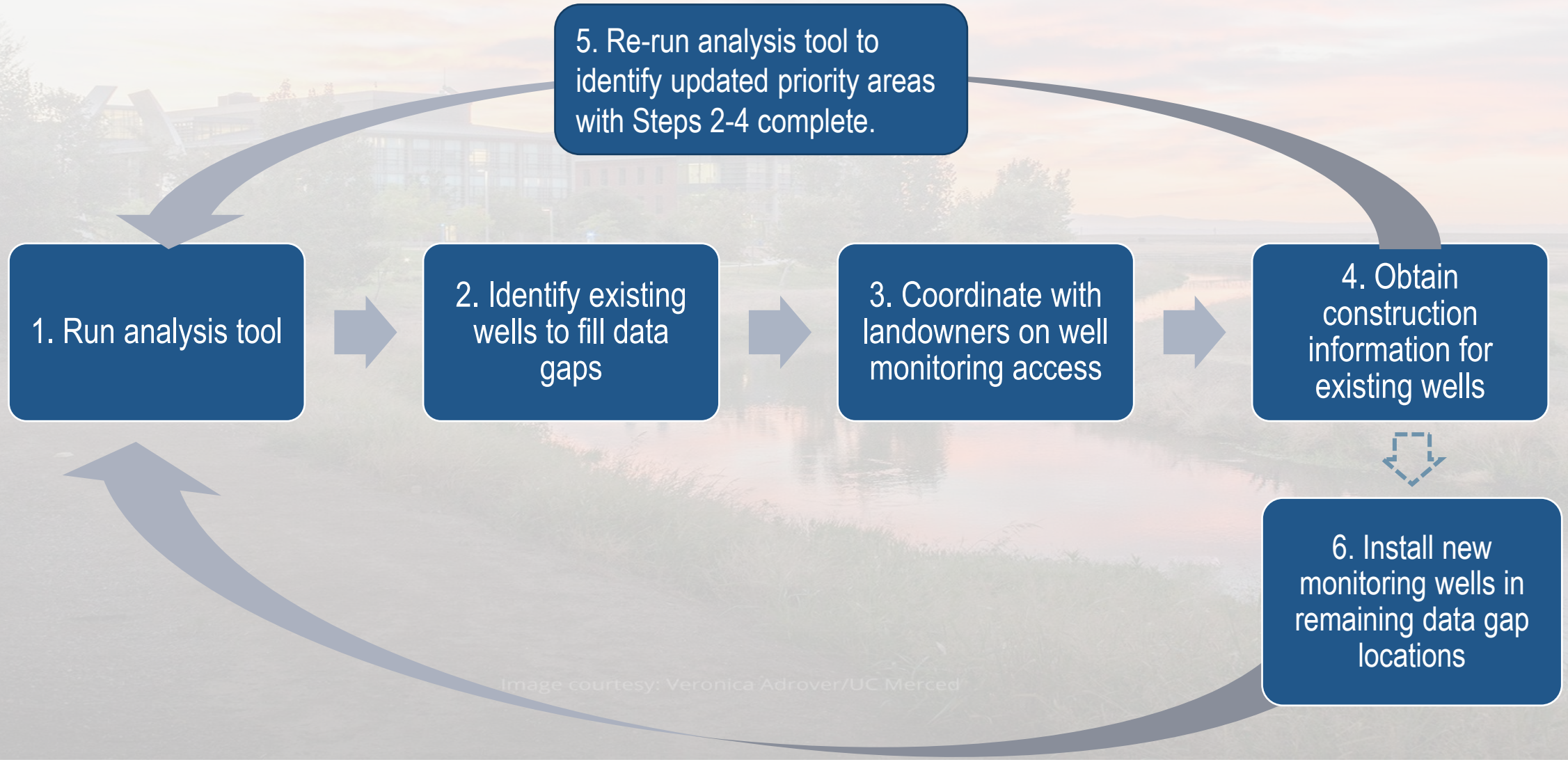
Above Corcoran Clay



Run spatial analysis tool to increase monitoring density: Outside Corcoran Clay



Implementation Plan for Groundwater Level Wells



Groundwater Quality – ESJWQC Groundwater Quality Trend Monitoring (GQTM)

Objectives include:

- Develop long-term groundwater quality information that can be used to evaluate the regional effects of irrigated agricultural practices and changes in agricultural practices,
- Understand long-term temporal trends in regional groundwater quality, particularly as they relate to effects from irrigated agriculture on potential sources of drinking water for communities

Monitoring design considerations include:

- Groundwater vulnerability
- Prioritization of High Vulnerability Areas
- Areas contributing recharge to communities reliant on groundwater, including disadvantaged communities (DACs)
- Top acreage commodities

Image courtesy: Veronica Adrover/UC Merced

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Groundwater Quality – ESJWQC Groundwater Quality Trend Monitoring (GQTM)

- Ultimately expected to have density of 1 well per 30 square miles (or higher)
- Spatial representation and statistical validity to be evaluated on an annual basis
- Efforts are ongoing to identify additional wells
  - Extensive work has already been done to identify well completion reports (total depth and screened interval), contact PWS, review existing wells in GAMA (DWR, USGS, etc.)
  - Has focused largely in “Upper Zone” of Central Valley (less focused on equivalent of Below Corcoran Clay)
- Upcoming effort of focused sampling expected in Merced in 2022

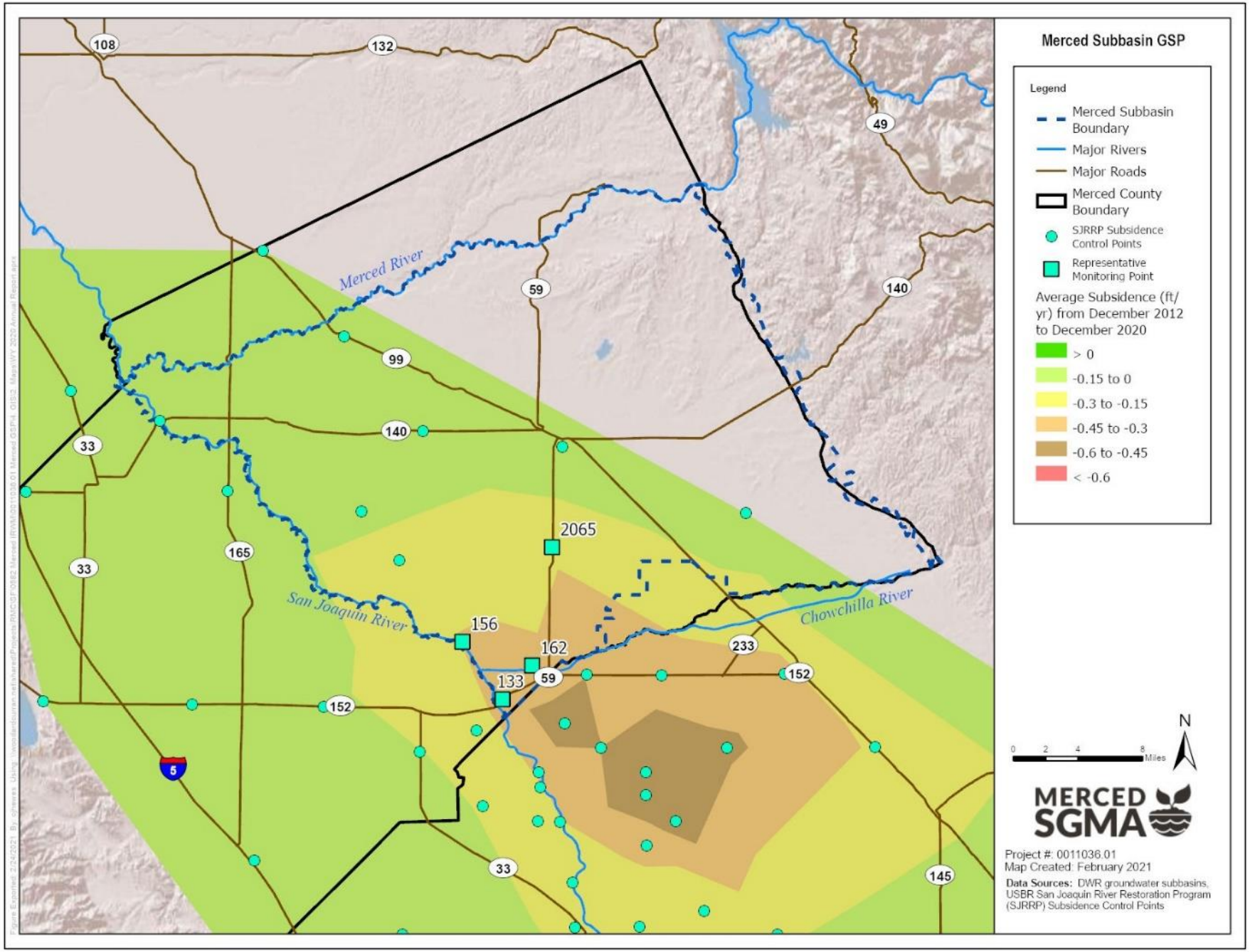
Data Gaps Plan recommendations

- Coordinate with existing efforts by ESJWQC in GQTM – may include increased frequency or other arrangements
- Analyze potential PWS wells in Below Corcoran for inclusion in network – may include increased frequency or other arrangements
- Other areas, deep and rural, may require additional efforts

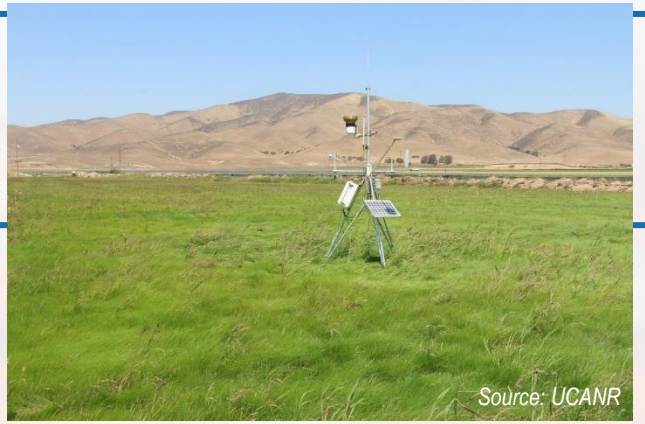
Image courtesy: Veronica Addrover/UC Merced

Subsidence

- Extensometers measure depth at which compaction is occurring
- Co-locate with GWL monitoring well in southern portion of basin
- Capture subsidence at multiple depths



Climate Monitoring



- Existing Merced CIMIS station site conditions limit the usefulness of data measured there
- Modeling and other efforts to date have used Los Banos station → introduces uncertainty due to being outside basin
- Future projects (remote sensing, etc.) would strongly benefit from:
  - A properly functioning CIMIS station → ongoing effort to improve current conditions
  - Siting and installing an additional CIMIS station to capture variability

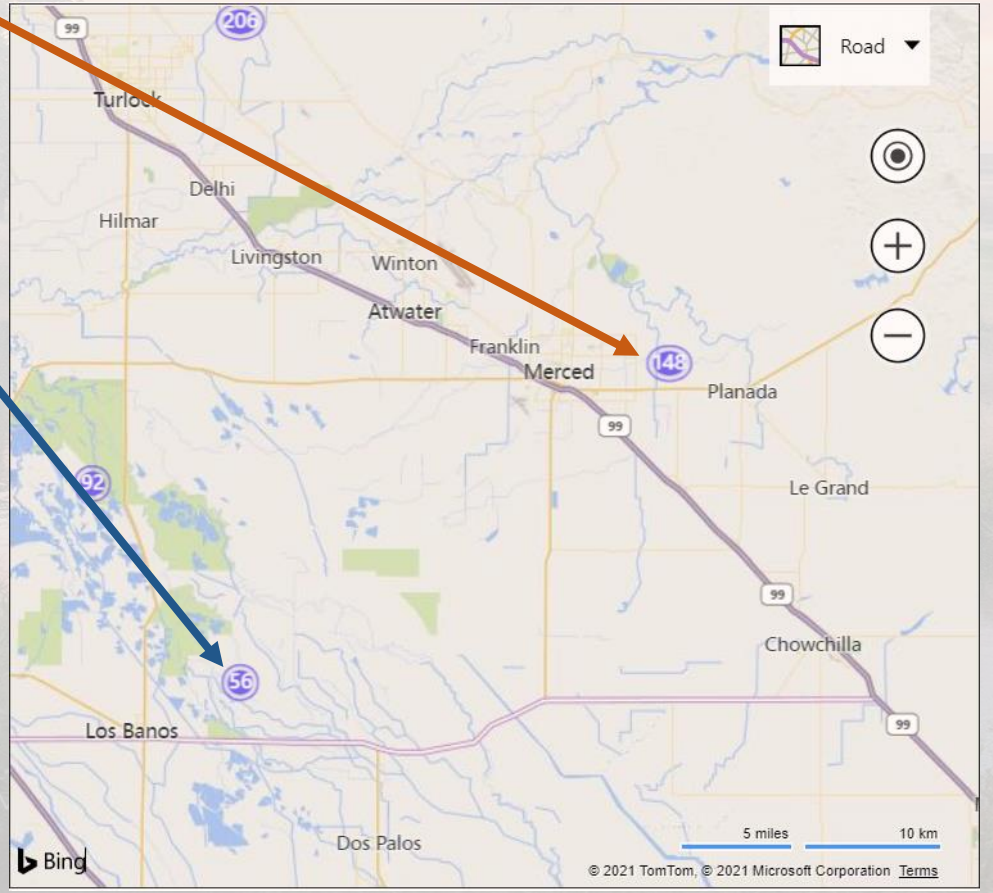


Image courtesy: Veronica Adrover/UC M

Meadowbrook Water System Intertie Feasibility Study

(see separate slide deck)

Image courtesy: Veronica Adrover/UC Merced

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Next Steps

Image courtesy: Veronica Adrover/UC Merced

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What's coming up next?

- Second Stakeholder Advisory Committee meeting July 12
- Adjourn to next meeting: July 26, 2021 at 1:15

GSP Coordination Committee

Coordination Committee Meeting – April 26, 2021

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