



## Stanislaus & Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency

1231 11<sup>th</sup> Street | Modesto, CA 95354  
Phone: (209) 526-7564 | Fax: (209) 526-7352  
Email: [strgba@mid.org](mailto:strgba@mid.org)

### STRGBA GSA AGENDA

**June 9, 2021 (1:30 p.m. – 2:00 p.m.)**

**Webinar Digital Platform or Phone Meeting**

<https://us02web.zoom.us/j/87846141611>

By phone: 1-669-900-9128

Webinar ID: 878 4614 1611

This meeting is being conducted via webinar for all seven member agencies, pursuant to Executive Orders signed by Governor Gavin Newsom related to the ongoing COVID-19 pandemic, including provisions regarding the Brown Act. Members of the public and member agency staff may join the meeting utilizing Zoom's webinar feature if desired, or a phone number as provided in this Agenda. Members of the public will continue to have the opportunity to provide public input via the webinar or phone features. Members of the public may also email public comments by 3:00 p.m. on the day preceding the GSA meeting to: [strgba.org](http://strgba.org). If public comments are timely submitted by email, then those comments will be identified during the public input section of the Agenda or during a specific agenda item if the agenda item is identified in the email. The Brown Act does not require a member of the public to state her or his name; please indicate in your email if you would like your name stated or if you want to remain anonymous. \_

#### **PUBLIC PARTICIPATION**

**The public may participate in this meeting in the two ways described below.**

Instructions for Participating in STRGBA GSA & Technical Advisory Meeting via Zoom Webinar or Phone

#### **On your desktop/iPad or tablet/laptop:**

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[City of Modesto](#) | [City of Oakdale](#) | [City of Riverbank](#) | [City of Waterford](#)  
[Modesto Irrigation District](#) | [Oakdale Irrigation District](#) | [Stanislaus County](#)



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1. Call to Order/Welcome and Introductions  
(Four agencies needed for a quorum)
2. Business from the Public  
Who: Public  
Expected Outcome: Interested persons are welcome to introduce any topic within the Agency's jurisdiction. Matters presented under this heading may be discussed but no action will be taken by the Agency at this meeting.
3. Topic: Election of GSA Chairman [Action Item]  
Who: Gordon Enas, Committee  
Expected Outcome: Approval
4. Topic: Approve 5/12/21 Meeting Minutes [Action Item]  
Who: Eric Thorburn, Committee  
Expected Outcome: Approval
5. Topic: Budget and Schedule Update  
Who: Gordon Enas, Committee  
Expected Outcome: Discussion
6. Topic: Public Outreach Update  
Who: Samantha Wookey, Committee  
Expected Outcome: Discussion
7. Topic: GSP Update  
Who: Todd Groundwater, Committee  
Expected Outcome: Discussion
8. Topic: Monitoring Well Update  
Who: Todd Groundwater, Committee  
Expected Outcome: Discussion
9. Next Meeting  
July 14, 2021 at 1:30 p.m. via Zoom
10. Items too late for the agenda



# AGENDA REPORT

**GSA Meeting Date:** June 9, 2021

<b>Subject:</b>	Appointment of STRGBA GSA Chair and Coordinator
<b>Recommended Action:</b>	Resolution appointing Mr. Eric Thorburn as Chair and Coordinator for the STRGBA GSA and assigning to him the duties and responsibilities set forth in Sections 4 and 5 of the Memorandum of Understanding Forming the STRGBA GSA.
<b>Background and Discussion:</b>	<p>The Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) was organized in 2017 by a Memorandum of Understanding (MOU) to manage the portion of the Modesto Subbasin that lies within the collective jurisdictions of the member agencies. The member agencies include the Cities of Modesto, Oakdale, Riverbank and Waterford, Modesto Irrigation District, Oakdale Irrigation District and Stanislaus County. Pursuant to the Sustainable Groundwater Management Act (SGMA), a combination of local agencies may form a Groundwater Sustainability Agency (GSA) through a MOU or other legal agreement.</p> <p>Section 4.3 of the MOU stipulates that the GSA shall be governed by a Committee and sets forth the membership requirements and responsibilities of the Committee. The Committee is responsible for electing a chair and vice chair from its members at the first meeting of each calendar year. The Committee is also responsible for appointing one of its members as the Coordinator with duties and responsibilities stipulated in Section 5 of the MOU.</p> <p>Since its inception, the STRGBA GSA has delegated the duties and responsibilities and the Chair and Coordinator to the same Committee member. The current Chair/Coordinator is vacating the position and therefore a new Chair/Coordinator must be selected to fill that post. Instead of holding an election to fill out the remainder of the previous Chair's term, the Committee has agreed to appoint one of its existing members, Mr. Eric Thorburn (OID), to fill the position.</p>
<b>Alternatives, Pros and Cons of Each Alternative:</b>	<p>Pros: Eliminates need to hold a separate election which could delay the transfer of responsibilities and potentially impact the schedule.</p> <p>Cons: None</p>
<b>Concurrence:</b>	N/A.
<b>Fiscal Impact:</b>	N/A.
<b>Recommendation:</b>	Resolution appointing Mr. Eric Thorburn as Chairman and Coordinator for the STRGBA GSA and assigning to him the duties and responsibilities set forth in

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Sections 4 and 5 of the Memorandum of Understanding Forming the STRGBA  
GSA.

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**Attachments:**

Supporting documents attached:

Resolution  Presentation  Other supporting docs  None attached

*Note: Original contracts and agreements are housed in the GSA Secretary's Office, phone (209) 526-7360.*

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Presenter
<i>Gordon Enas</i>
Gordon Enas
6/3/2021
Date Signed

GSA Chairman

John B. Davids, P.E.
6/3/2021
Date Signed



## AGENDA REPORT

**D R A F T**

### **RESOLUTION NO. 2021-3**

**RESOLUTION APPOINTING MR. ERIC THORBURN  
AS CHAIRMAN AND COORDINATOR FOR THE  
STRGBA GSA AND ASSIGNING TO HIM THE DUTIES  
AND RESPONSIBILITIES SET FORTH IN SECTIONS 4  
AND 5 OF THE MEMORANDUM OF  
UNDERSTANDING FORMING THE STRGBA GSA.**

WHEREAS, the STRGBA GSA was organized in 2017 by a Memorandum of Understanding (MOU) to manage the portion of the Modesto Subbasin that lies within the collective jurisdictions of the member agencies; and

WHEREAS, Section 4.3 of the MOU stipulates that the GSA shall be governed by a Committee and sets forth the membership requirements and responsibilities of the Committee; and

WHEREAS, the Committee is responsible for electing a chair and vice chair from its members at the first meeting of each calendar year, and for appointing one of its members as the Coordinator with duties and responsibilities stipulated in Section 5 of the MOU; and

WHEREAS, the STRGBA GSA has delegated the duties and responsibilities and the Chair and Coordinator to the same Committee member.

WHEREAS, the current Chair/Coordinator is vacating the position and therefore a new Chair/Coordinator must be selected to fill that post.

BE IT RESOLVED, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency does hereby appoint Mr. Eric Thorburn as Chairman and Coordinator for the STRGBA GSA and assigning to him the duties and responsibilities set forth in Sections 4 and 5 of the Memorandum of Understanding Forming the STRGBA GSA.



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## MEETING MINUTES

**May 12, 2021 (1:30 p.m. – 2:00 p.m.)**

The meeting was called to order at 1:30 p.m.

### 1. Welcome and Introductions

The following members of the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) attended via Zoom:

Modesto Irrigation District (MID): John Davids  
City of Waterford: Mike Pitcock  
City of Modesto: Miguel Alvarez  
Stanislaus County: Walt Ward  
City of Oakdale: Cody Bridgewater  
Oakdale Irrigation District: Eric Thorburn

#### Other Attendees:

Alexis Stevens, Somach, Simmons & Dunn	Bonnie Fogarty
Erika Durrer	John Mauterer, MID
Stacy Henderson, Terpstra Henderson	Ngodoo J. Atume
Hilary Reinhard, Provost & Pritchard	Phyllis Stanin, Todd Groundwater
Gordon Enas, MID	Debbie Montalbano
Samantha Wookey, MID	
John Mensinger, MID	
David Orth	
Emily Sheldon	
Valerie Kincaid	
Khandriale Clark, Stantec	

### 2. Business from the Public

N/A

### 3. Approve 4/14/21 Minutes [[Action item](#)]

Ward moved, 2<sup>nd</sup> by Thorburn, to approve 4/14/21 meeting minutes. Motion carried.



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**4. Budget and Schedule Update**

Enas reported that Todd Groundwater has expended approximately 57% of the budget and 78% of the time scheduled through April 30, 2021.

**5. Public Outreach Update**

Wookey informed the group that a Spring 2021 newsletter was being developed and should be available later this month. She also mentioned that the next Office Hours webinar is scheduled for May 28, 2021 with a focus on sustainable management criteria. Davids asked if there will be an email reminder sent out for the Office Hours. Wookey answered yes. Enas stated that Stantec has created public outreach presentation templates for use by member agencies to inform stakeholders about SGMA and the GSP process. Henderson asked if the materials were available online for review. Davids responded that the meeting materials will be posted to the STRGBA website.

**6. GSP Schedule**

Stanin reported that the GSP schedule has been updated and is included in the meeting handouts. Three chapters have been released so far and are posted on the website for public review and comment. Chapters covering water budgets and the numerical model development are expected to be released by the end of June. The final GSP must be adopted by January 2022.

**7. Governing Body Engagement**

Davids presented responses from a questionnaire distributed to member agency representatives asking them to describe their efforts in updating their governing bodies on the GSP progress and identifying critical issues. The purpose was to prompt the agency representatives to engage their governing bodies on a regular basis prior to adoption of the GSP. Ward stated Phyllis Stanin would be presenting on the GSP to the Stanislaus County Water Advisory Committee.

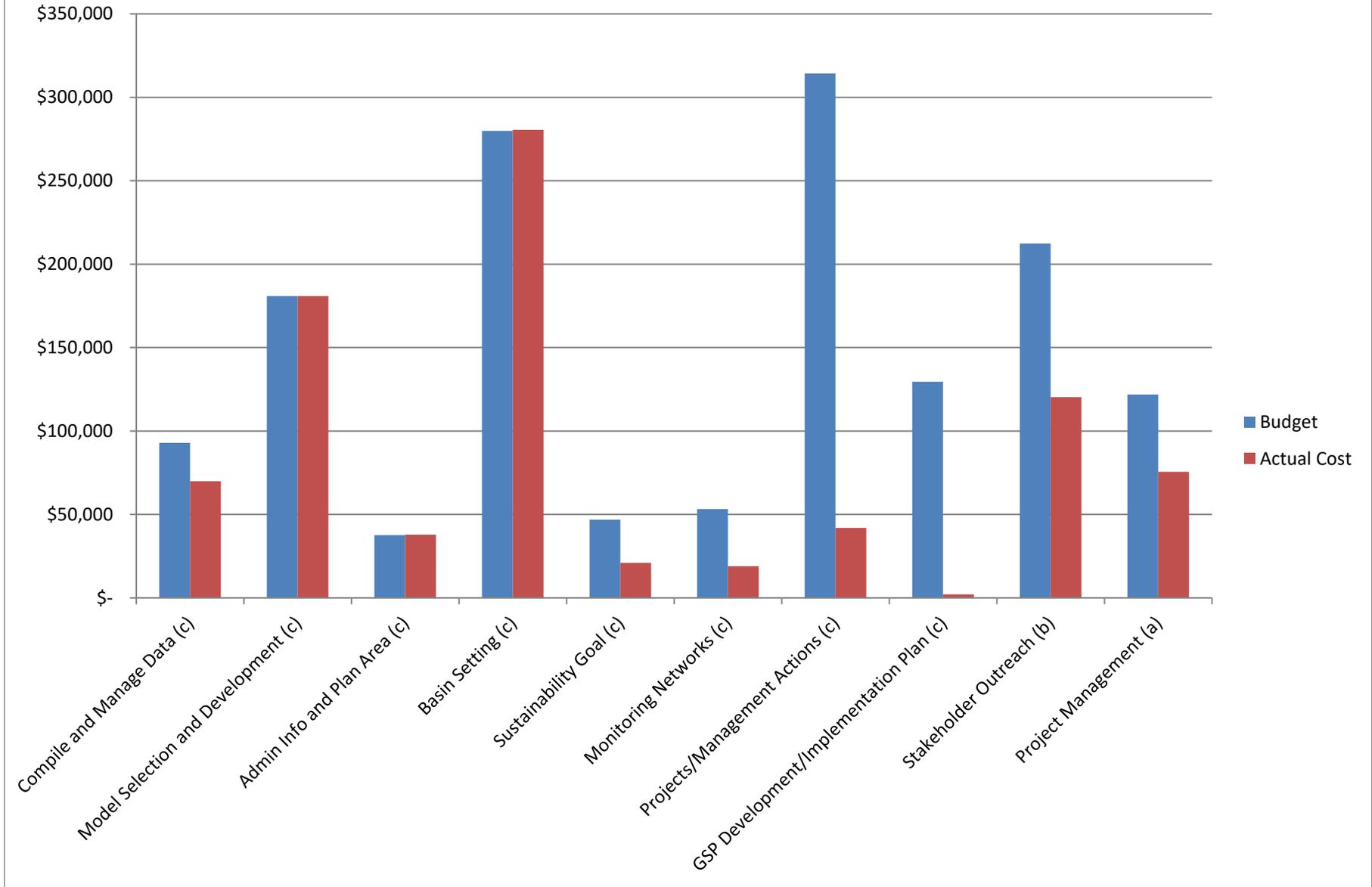
**8. Next meeting**

June 9, 2021 at 1:30 p.m. via Zoom webinar

**9. Items too late for the agenda**

N/A

### Cost To Prepare GSP (September 2018 - April 2021)





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## TECHNICAL ADVISORY COMMITTEE AGENDA

**May 12, 2021 (2:00 p.m. – 3:00 p.m.)**

**Webinar Digital Platform or Phone Meeting**

<https://us02web.zoom.us/j/87846141611>

By phone: 1-669-900-9128

Webinar ID: 878 4614 1611

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  - a. Wait until the last four digits of your phone number is called by the Host.



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2. Business from the Public  
Who: Public  
Expected Outcome: Interested persons are welcome to introduce any topic within the Agency's jurisdiction. Matters presented under this heading may be discussed but no action will be taken by the Agency at this meeting.
3. Topic: Approve 4/14/21 Meeting Minutes [[Action Items](#)]  
Who: Eric Thorburn, Committee  
Expected Outcome: Approval
4. Topic: Designation of Management Areas  
Who: Todd Groundwater, Committee  
Expected Outcome: Discussion
5. Topic: Monitoring Wells – MT's and MO's  
Who: Todd Groundwater, Committee  
Expected Outcome: Discussion
6. Topic: Sustainable Management Criteria  
Who: Todd Groundwater, Committee  
Expected Outcome: Discussion
7. Next Meeting  
July 14, 2021 at 2 p.m. (following STRGBA GSA monthly meeting) via Zoom
8. Items too late for the agenda



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**TECHNICAL ADVISORY COMMITTEE  
MEETING MINUTES**

**May 12, 2021 (2:00 p.m. – 3:00 p.m.)**

The meeting was called to order at 2:00 p.m.

**1. Welcome and Introductions**

The following members of the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) attended via Zoom:

Modesto Irrigation District (MID): John Davids  
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Oakdale Irrigation District: Eric Thorburn

**Other Attendees:**

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Khandriale Clark, Stantec

Bonnie Fogarty  
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Ngodoo J. Atume  
Phyllis Stanin, Todd Groundwater  
Debbie Montalbano

**2. Business from the Public**

N/A



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**3. Approve 4/14/21 Minutes [Action item]**

Thorburn moved, 2<sup>nd</sup> by Ward, to approve 4/14/21 meeting minutes. Motion carried.

**4. Chronic Lowering of Water Levels/ Project Management Actions**

Stanin began her presentation with a discussion of the sustainability indicator, Chronic Lowering of Water Levels. The presentation can be accessed at the STRGBA GSA website, [www.strgba.org](http://www.strgba.org).

- Mensinger commented on the definition of Undesirable Results. The problems on the eastside stem from total reliance on groundwater and have no bearing on single-year or multi-year drought. Including “multi-year drought” in the definition of Undesirable Result won’t impact the eastside. Stanin responded that 100% reliance on groundwater is impacted by drought since declines in water levels get much worse. Davids suggested adding “and sole reliance on groundwater” to the definition after “multi-year drought”.
- Atume asked if four monitoring wells in the DAC’s is enough to provide adequate representation for domestic wells? Stanin responded that there are currently four CASGEM wells in the network, but several of the ten new monitoring wells were located specifically targeting DAC’s and will help fill those data gaps.
- Fogarty asked how we plan on monitoring pumping east of Crabtree Road? Stanin responded that we plan on expanding the monitoring well network in the future.
- Kincade brought up that exceeding MT’s using a percentage of wells alone could skew achieving undesirable results if the well locations are not included in the definition. Stanin responded that using a percentage of wells for the MT’s needs further analysis since Sustainable Management Criteria and monitoring networks go hand in hand. Stanin also mentioned that after all of the MT’s are established, we may need to go back and adjust those that may be the most limiting.

**5. Draft Sustainability Goal**

Stanin next presented the draft Sustainability Goal for the basin. Several meeting participants suggested edits to the goal language. Stanin will provide a redraft at the next meeting.

**6. Preliminary List of Projects and Management Actions**

Stanin first presented some background as well as a conceptual list of Projects and Management Actions. This initial list is included in the meeting handouts and can be accessed at the STRGBA GSA website. The first part of the discussion covered the Project list.



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- Davids mentioned that even though the list includes providing excess surface water to non-district areas, the GSA will not erode the authority of the MID and OID Boards to provide surface water to non-district east.
- Henderson asked if credit will be given for on-farm recharge? Davids responded that from a project perspective, any credit could only be attributed to those who apply surface water above and beyond what occurs today.
- Henderson also commented that preserving land for future recharge projects could inhibit future growth.
- Thorburn stated that projects listed aren't commitments, since that will take Board approval. We should keep the list broad to allow flexibility but still be able to apply for grant funding from the State. Also, we should add "stormwater capture" to list of groundwater recharge on the eastside.

Stanin then presented the list of Management Actions.

- Davids mentioned that the MID Board discussed imposing groundwater extraction fees since surface water customers aren't causing the problem and so isn't fair to equally assess all landowners for projects. It would be better to charge an administrative fee for actions that benefit all, but those who rely on groundwater should pay more.
- Davids also asked if Stanislaus County would allow the GSA to be part of the well permitting process? Ward responded that it is likely the GSA will take an active role while the County acts in a ministerial capacity for obtaining permits.
- Thorburn stated support for assessing an extraction fee to pay for projects, but OID wouldn't want to pay an equal share since they are not causing the problems.
- Henderson also stated that assessing an extraction fee would be problematic for her clients. They would want to know what the fees will be used for. Who pays? What is the rate?
- Henderson also asked if rotational fallowing would be considered throughout the whole basin? Davids responded that fallowing is accepted in other parts of the State, but should be used with great caution. Compensation is usually associated with fallowing and fallowing should be limited to certain geographical areas.
- Kincaid mentioned that extraction fees are different than Prop 218 fees, and you need to know a lot about extraction and metering. Management Actions can also include a limit on extraction.

### 7. Next Meeting

June 9, 2021

### 8. Items too late for the agenda

N/A



# MODESTO SUBBASIN GSP MANAGEMENT AREAS & SUSTAINABLE MANAGEMENT CRITERIA

STRGBA TECHNICAL ADVISORY COMMITTEE (TAC) MEETING

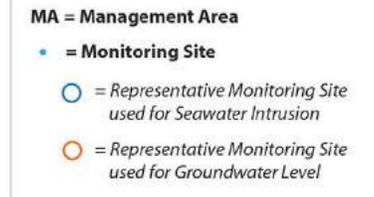
June 9, 2021

# PRESENTATION OUTLINE

- Preliminary Management Areas
- Sustainable Management Criteria for Chronic Lowering of Water Levels: Minimum Thresholds and Measurable Objectives
- Preliminary Monitoring Network Wells with MTs and MOs

# GSP REGULATIONS ON MANAGEMENT AREAS

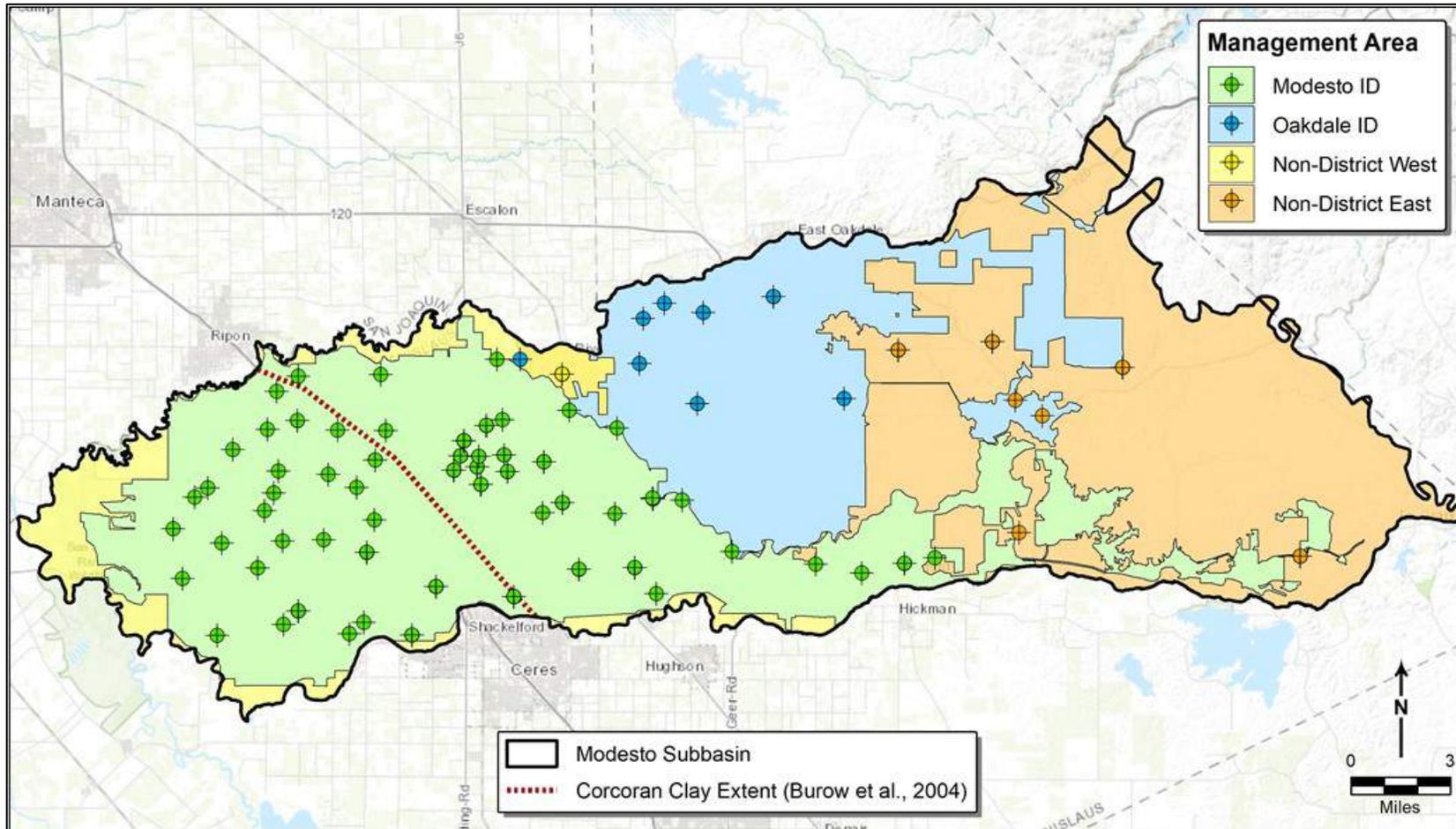
- **Management areas (MA):** an area of a subbasin in which different MTs, MOs, monitoring, and/or projects are selected based on differences in water use, water sources, geology, aquifer characteristics, or other factors. (§351(r))
- *Undesirable results* definition must be the same for all MAs.
- Use management areas (MAs) to *facilitate implementation of the Plan.*



(DWR, 2017)

***In the Modesto Subbasin, MAs based on different water sources may allow for more focused management.***

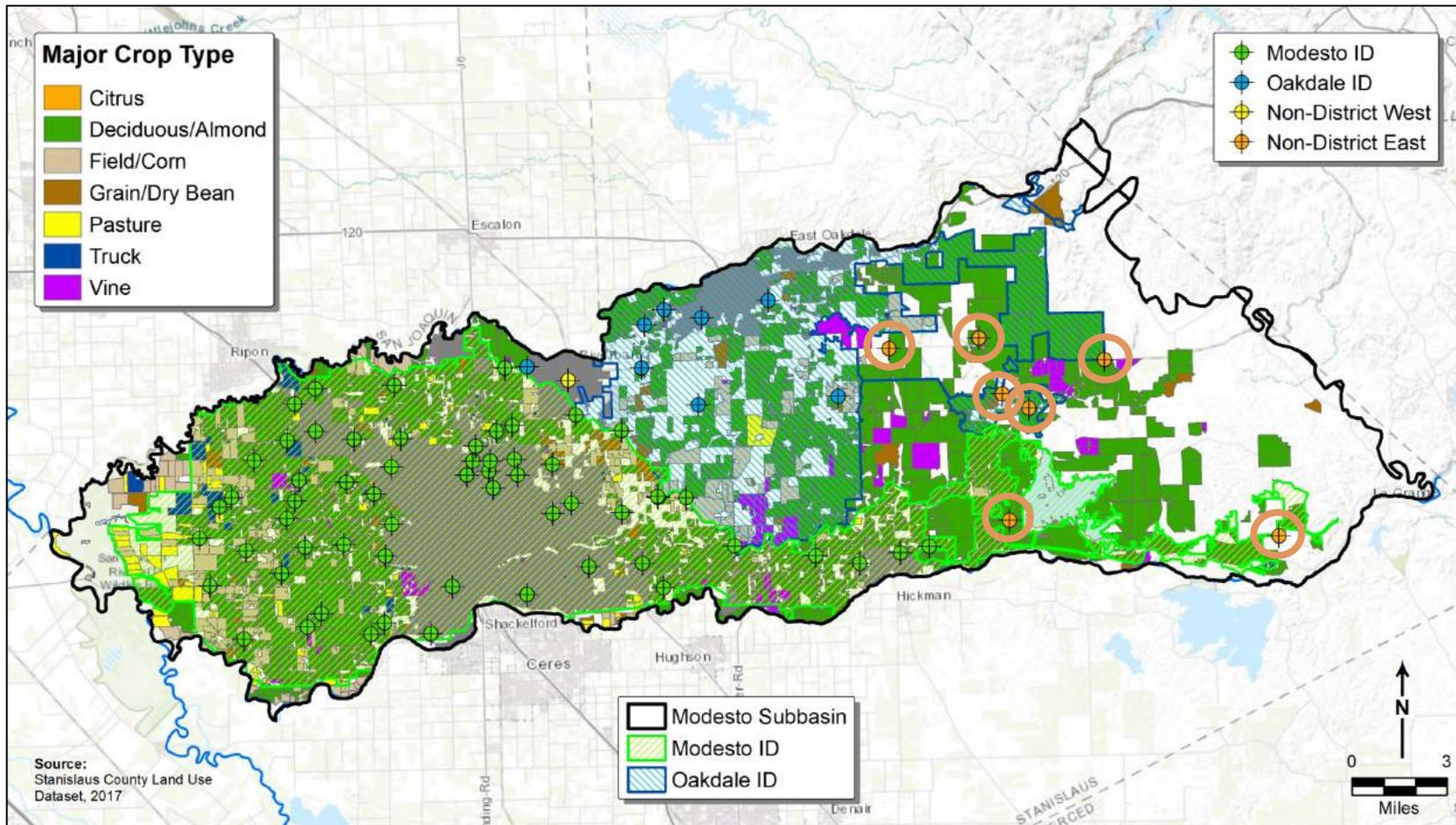
# PRELIMINARY MANAGEMENT AREAS



- Previous zones established for water budget analysis may serve as useful MAs
- MAs may follow jurisdictional boundaries to facilitate management
- Candidate monitoring wells assigned to each MA for further evaluation

Draft

# MANAGEMENT AREAS AND LAND USE (2017)



- Monitoring wells insufficient to cover all developed lands in eastern Subbasin
- 7 wells assigned to Non-District East MA
- Management Action to fill monitoring data gaps in the future



## POTENTIAL APPROACH

# UNDESIRABLE RESULTS (UR) AND MINIMUM THRESHOLDS (MT)

### Undesirable Result (UR) Definition

Significant and unreasonable groundwater level declines such that water supply wells are adversely impacted in a manner that cannot be readily managed or mitigated.



The MT will be expressed as the historic low groundwater elevation observed from WY 1991 through WY 2020 at each representative monitoring location, based on available data.

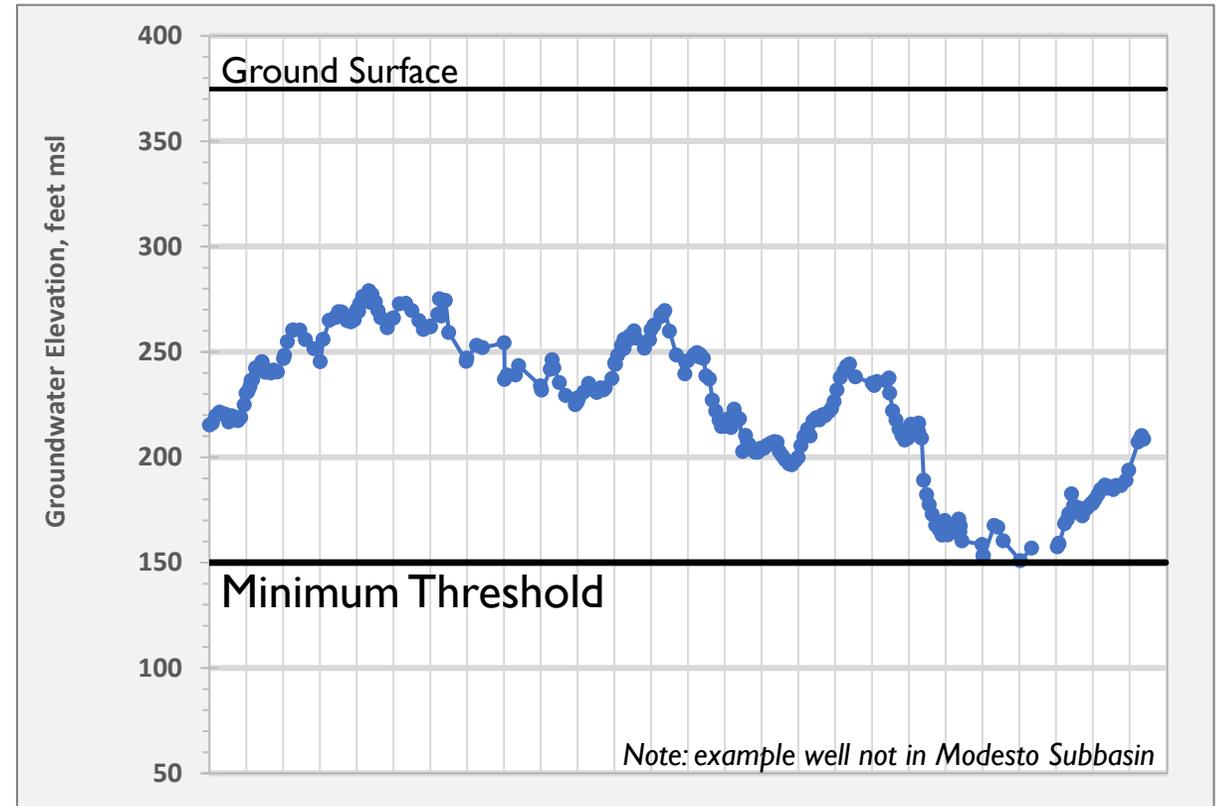
The UR will be evidenced by an exceedance of a minimum threshold (MT) at 30 percent of the representative monitoring wells in each Management Area during six consecutive semi-annual monitoring events.

*(Framework may be modified based on final monitoring network)*



# MINIMUM THRESHOLDS (MTs) AND MONITORING WELLS

- Water level records in candidate monitoring wells are evaluated to quantify a Minimum Threshold (MT) at each representative monitoring location
- Selected at historic low water level during period of record
- Also consider approach for Measurable Objective (MO)

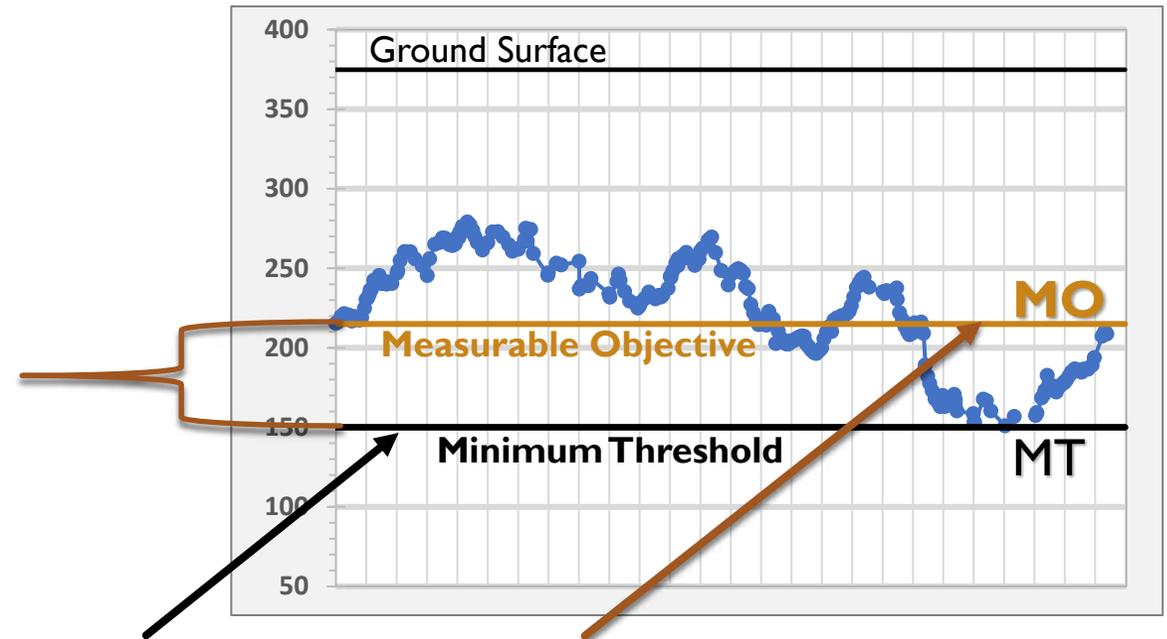




# MEASURABLE OBJECTIVES (MOs) AND MONITORING WELLS

Measurable Objectives definition: *specific, quantifiable goals for the maintenance or improvement of groundwater conditions that have been included in an adopted Plan to achieve the sustainability goal for the basin.* (§351(s))

- MOs are quantitative goals for desired groundwater conditions (DWR, 2017)
- Provide a margin of operational flexibility (distance between MO and MT)
- If an undesirable result occurred prior to Jan 1, 2015, MOs must be set to either *maintain or improve 2015 conditions*

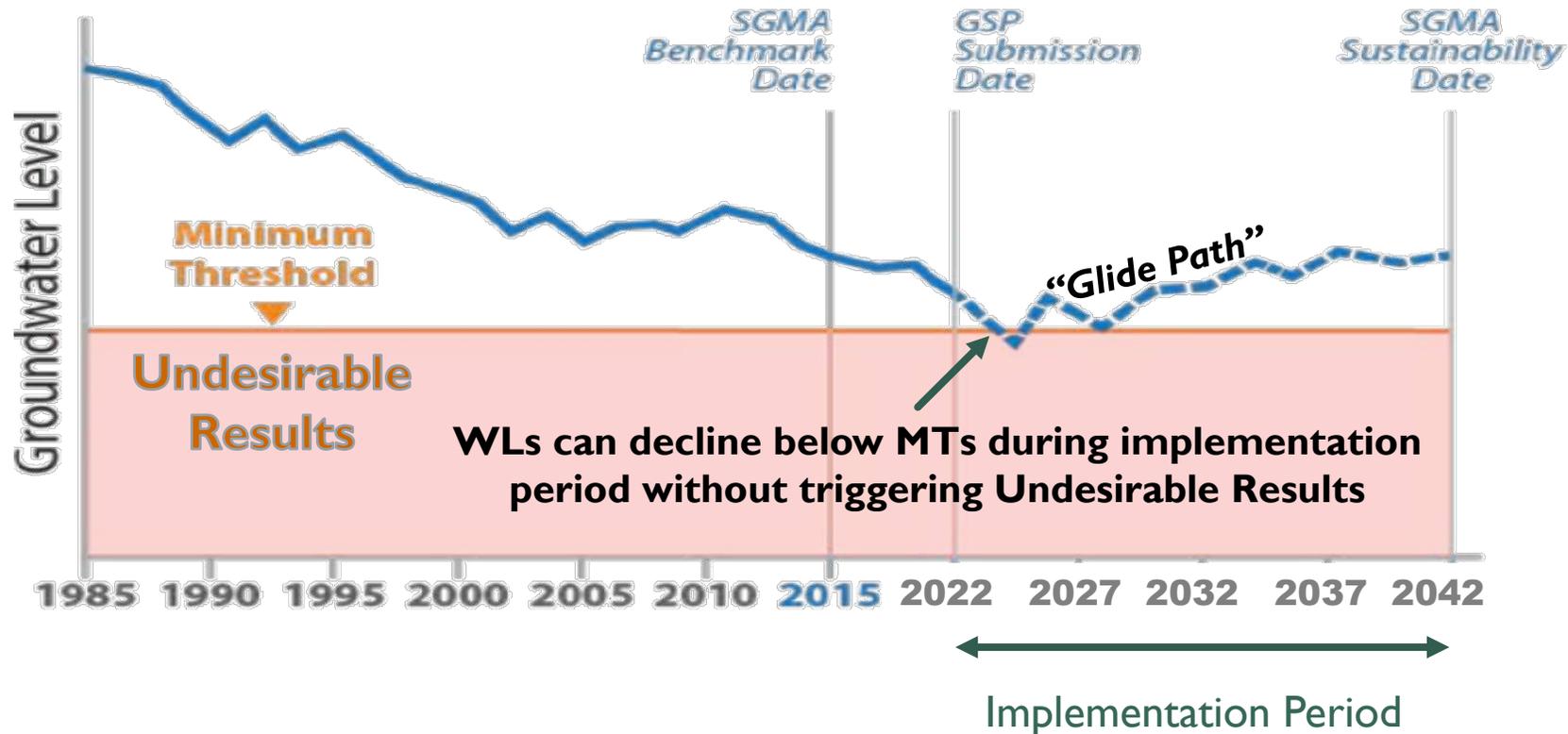


**MT set at historic low water levels**

**MO set at midpoint between high water level and MT**



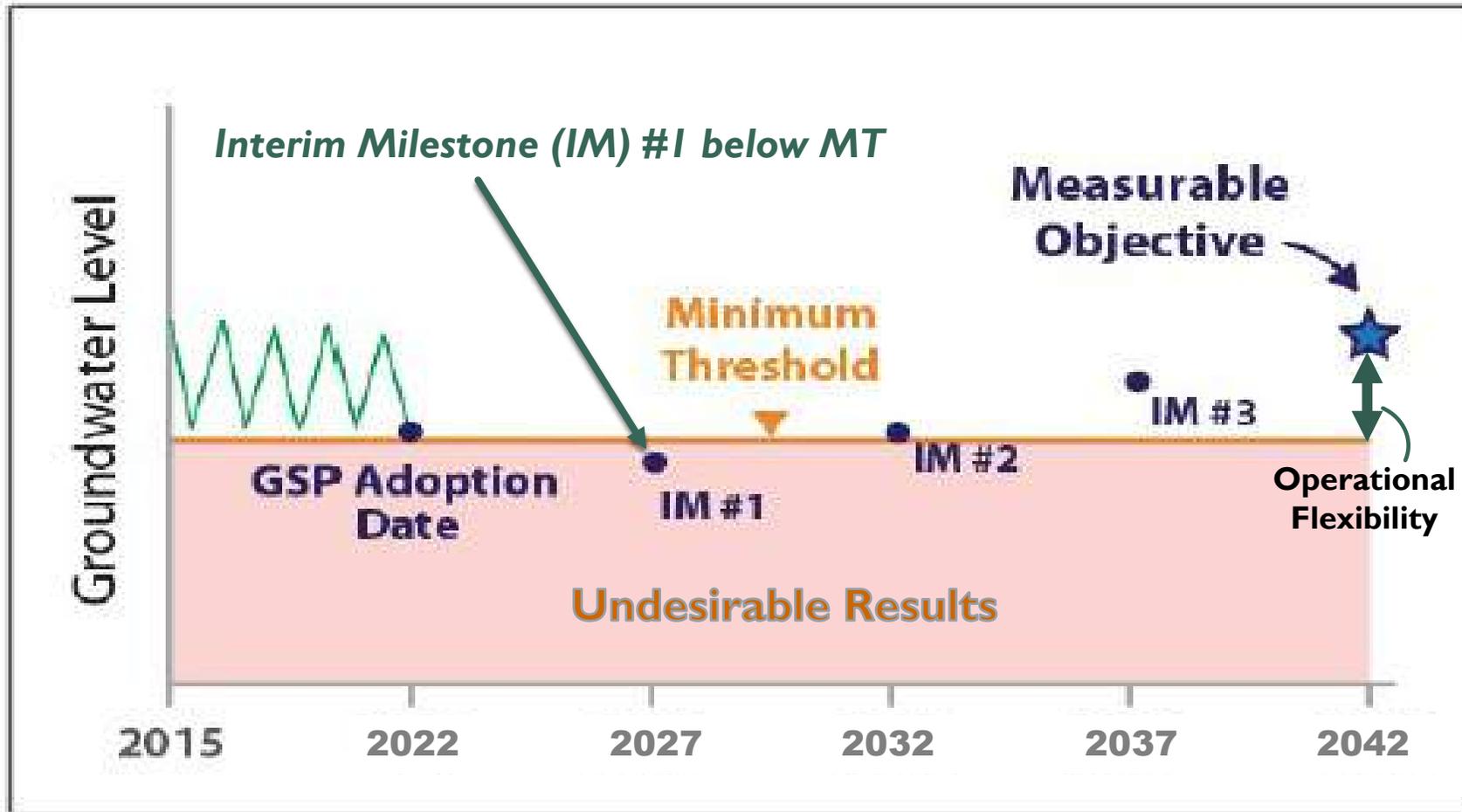
# APPLICATION OF SUSTAINABLE MANAGEMENT CRITERIA DURING 20-YEAR IMPLEMENTATION PERIOD (2022 – 2042)



- Water levels will continue to decline until projects and management actions are implemented
- Use Interim Milestones (IMs) to chart a “glide path” to sustainability



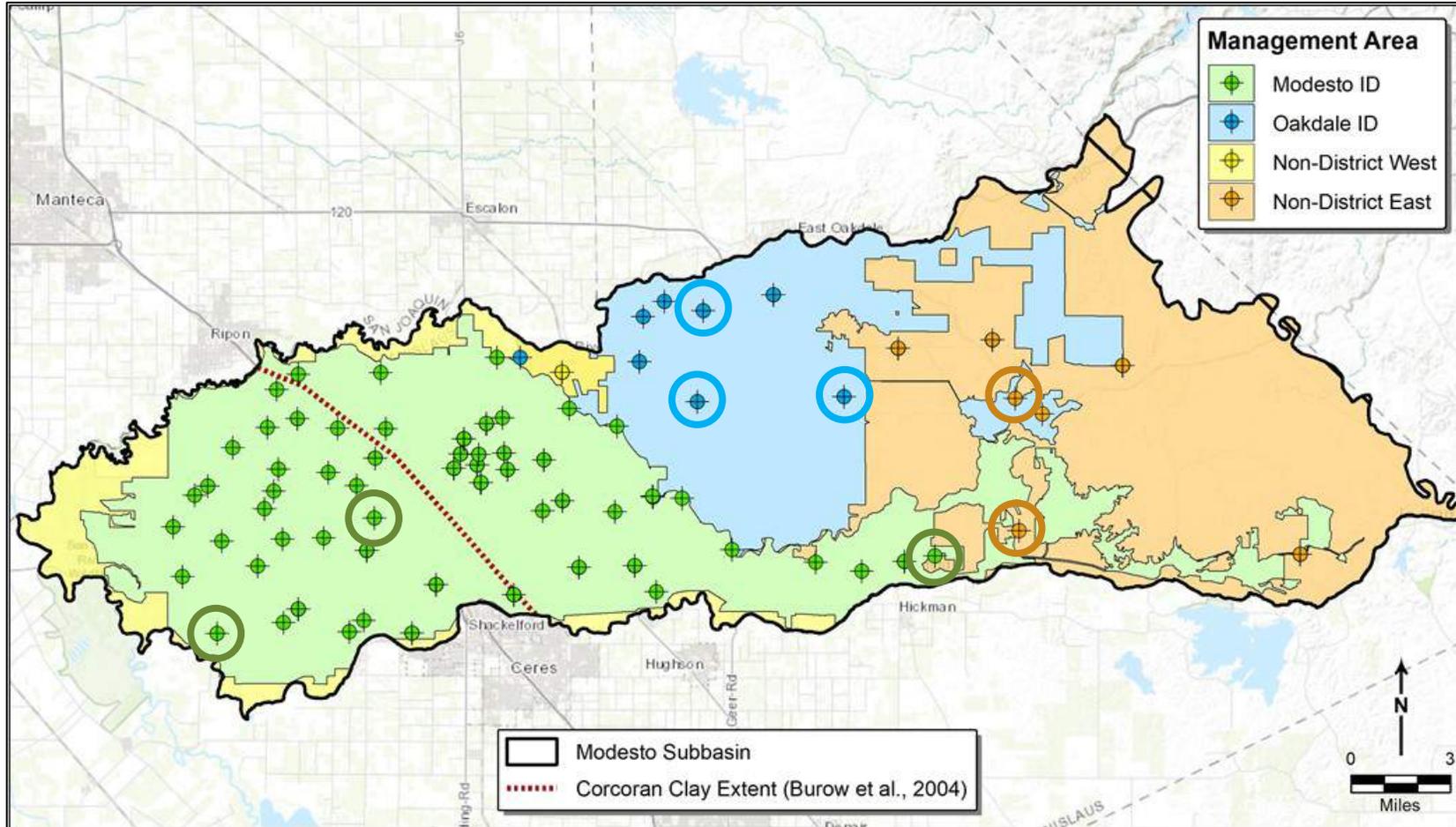
# APPLICATION OF SUSTAINABLE MANAGEMENT CRITERIA DURING 20-YEAR IMPLEMENTATION PERIOD (2022 – 2042)



- Use **Interim Milestones (IM)** for compliance during the Implementation Period
- IMs define a planned pathway to reach sustainability in five-year increments.



# APPLICATION OF SUSTAINABLE MANAGEMENT CRITERIA TO MONITORING WELLS

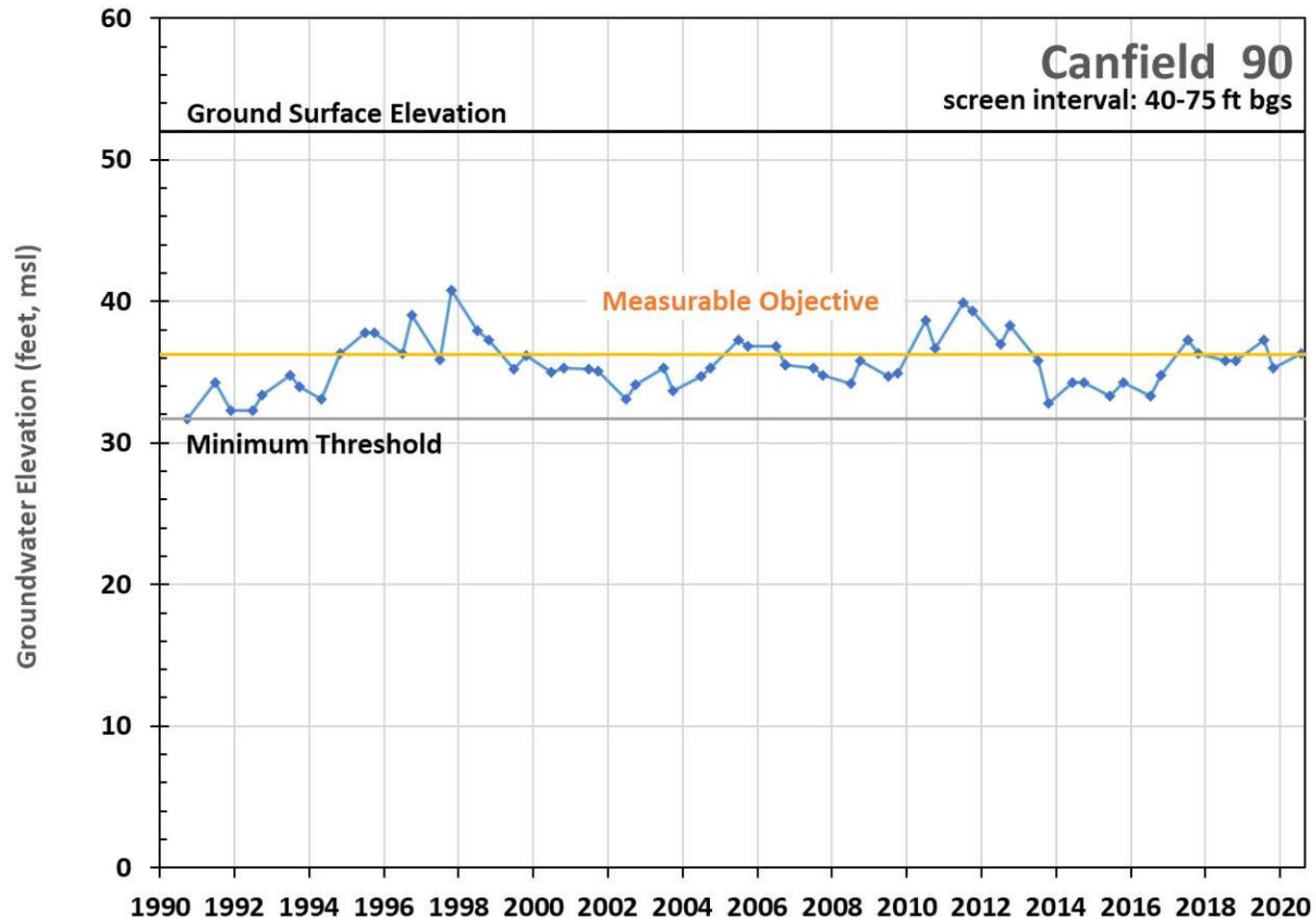


- Select example monitoring wells from each MA
- Apply chronic lowering of water levels draft criteria for MTs and MOs

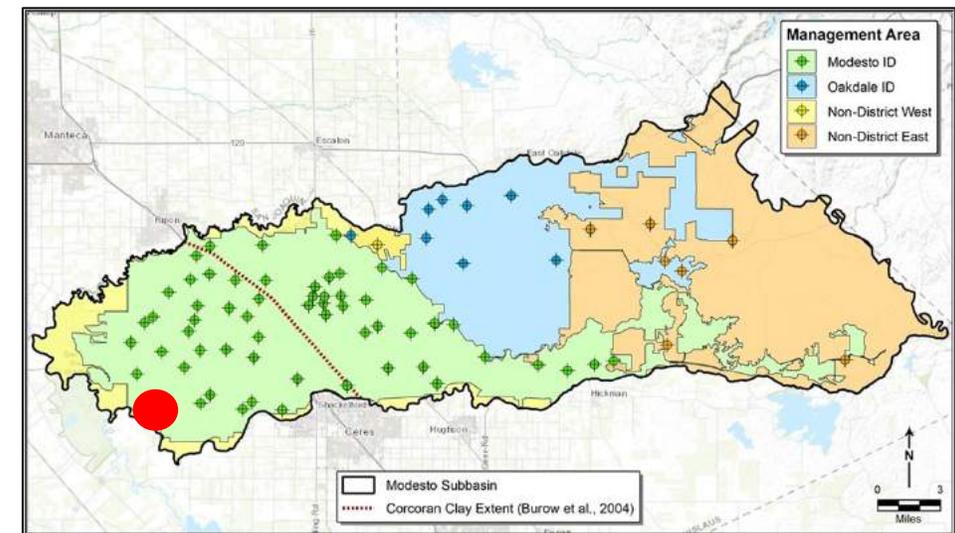
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# MINIMUM THRESHOLDS & MEASURABLE OBJECTIVES MODESTO ID MANAGEMENT AREA



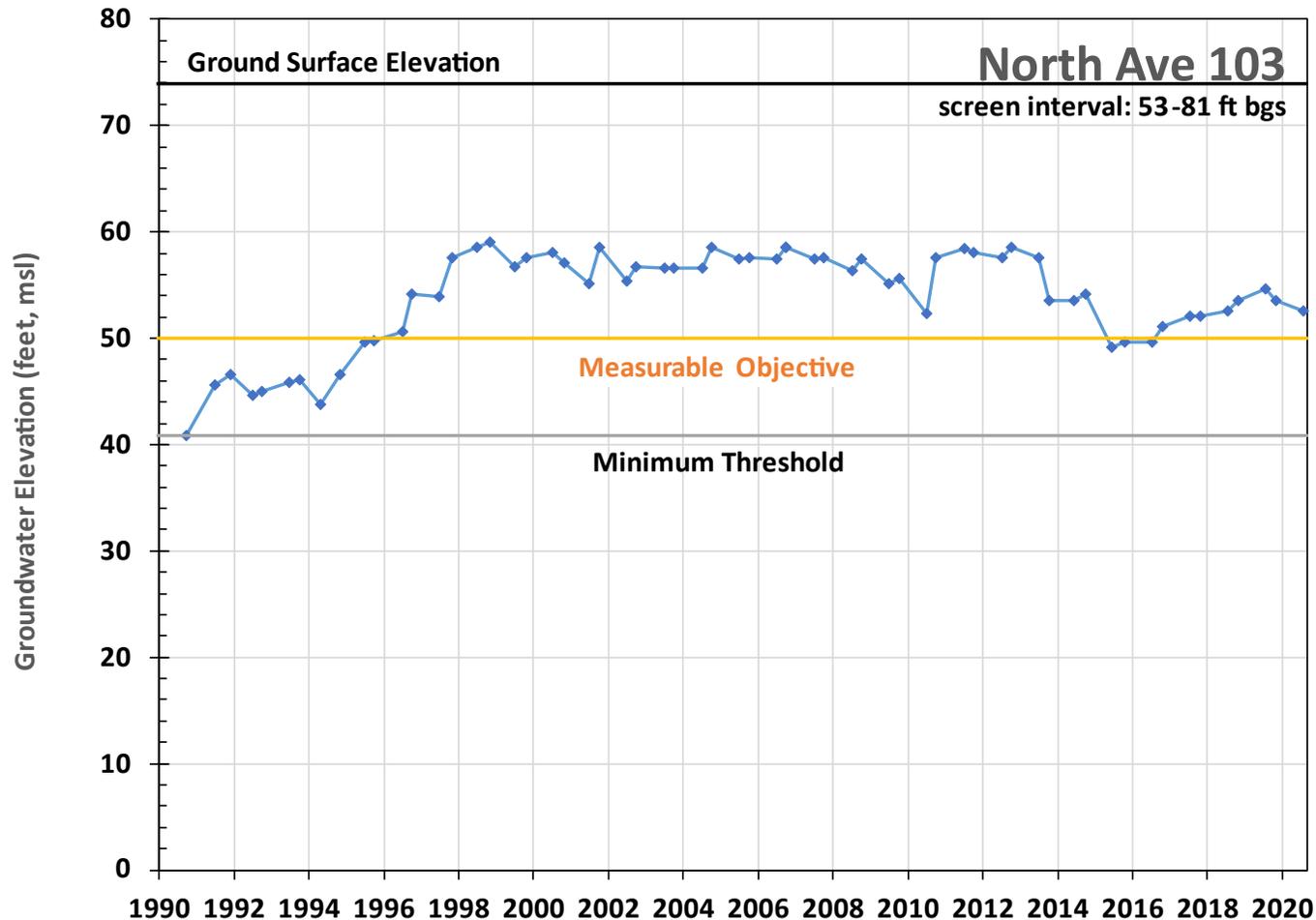
- Western shallow wells with small fluctuations over period of record
- Historic low water levels in 1990s drought
- 2013-2014 water levels similar to 1990s water levels



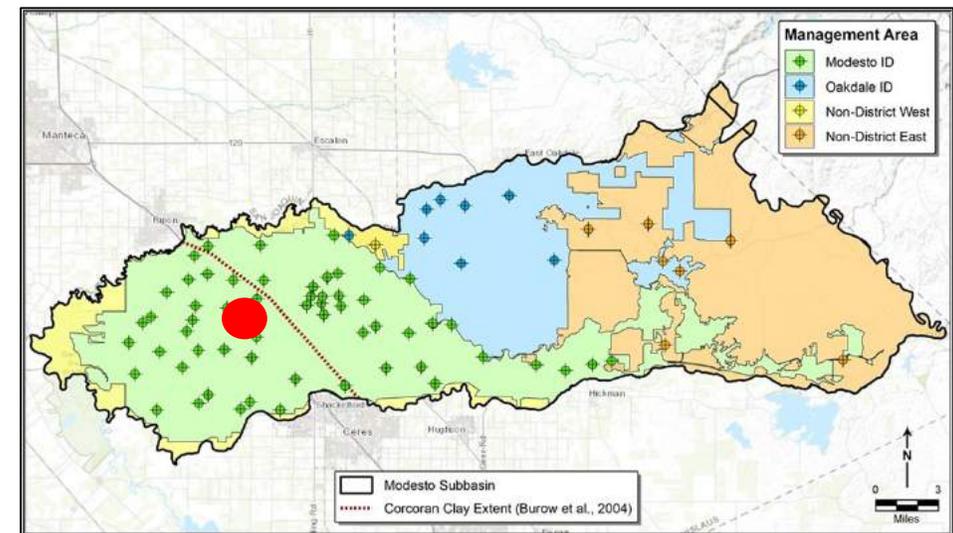


# MINIMUM THRESHOLDS & MEASURABLE OBJECTIVES

## MODESTO ID MANAGEMENT AREA



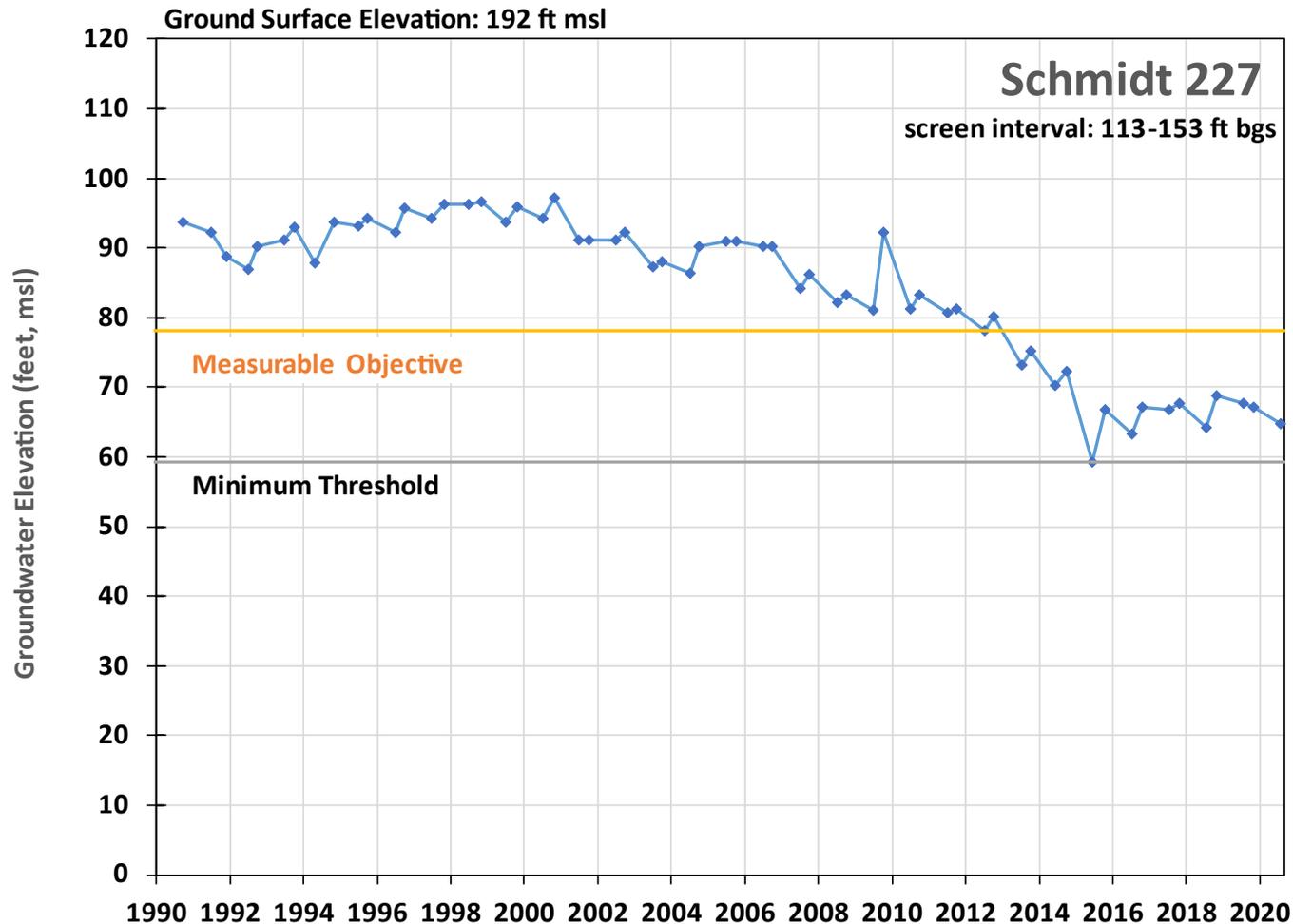
- Western wells in Modesto observed historic low levels in 1990s drought prior to surface water availability



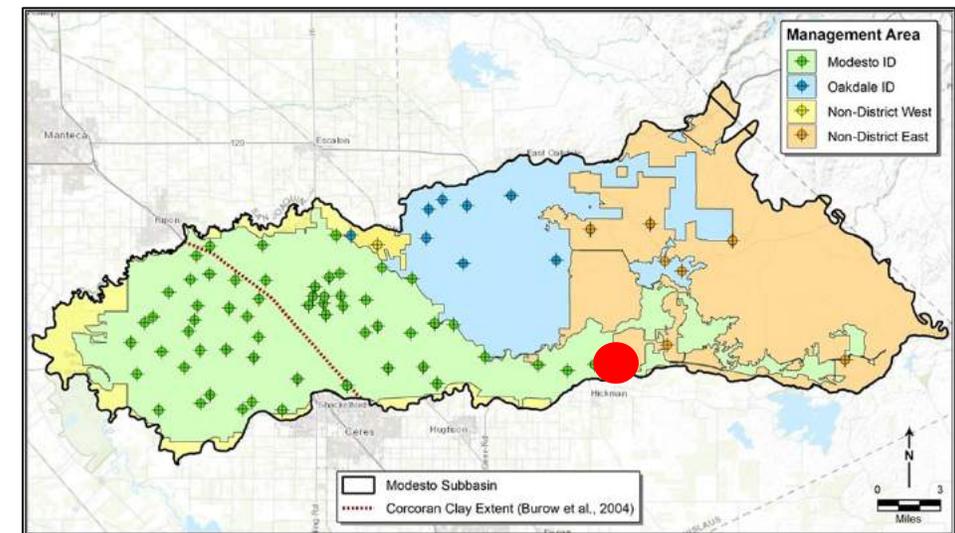


# MINIMUM THRESHOLDS & MEASURABLE OBJECTIVES

## MODESTO ID MANAGEMENT AREA



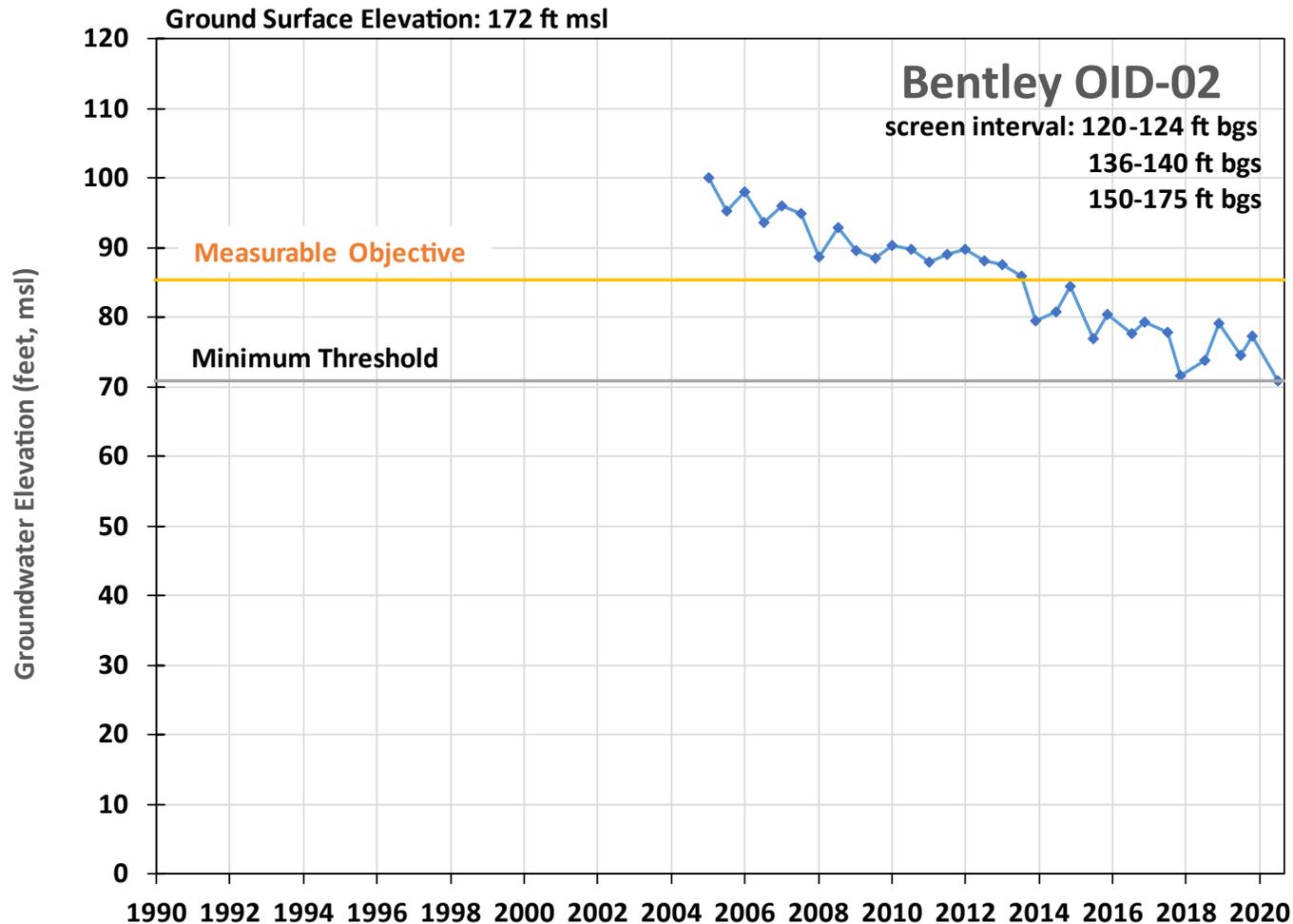
- Larger overall declines in east; may be influenced by Non-District East pumping
- Wells near river may also be used to monitor *Interconnected Surface Water*



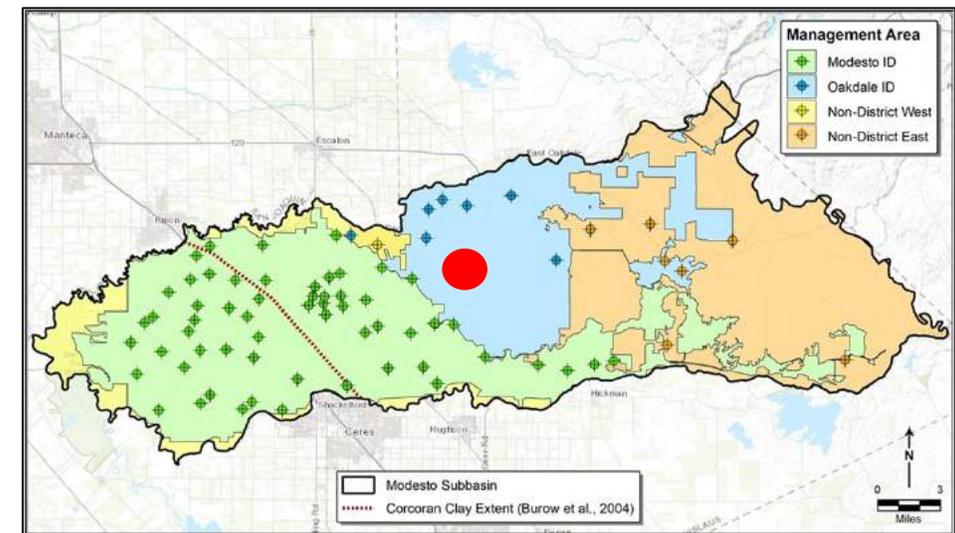


# MINIMUM THRESHOLDS & MEASURABLE OBJECTIVES

## OAKDALE ID MANAGEMENT AREA



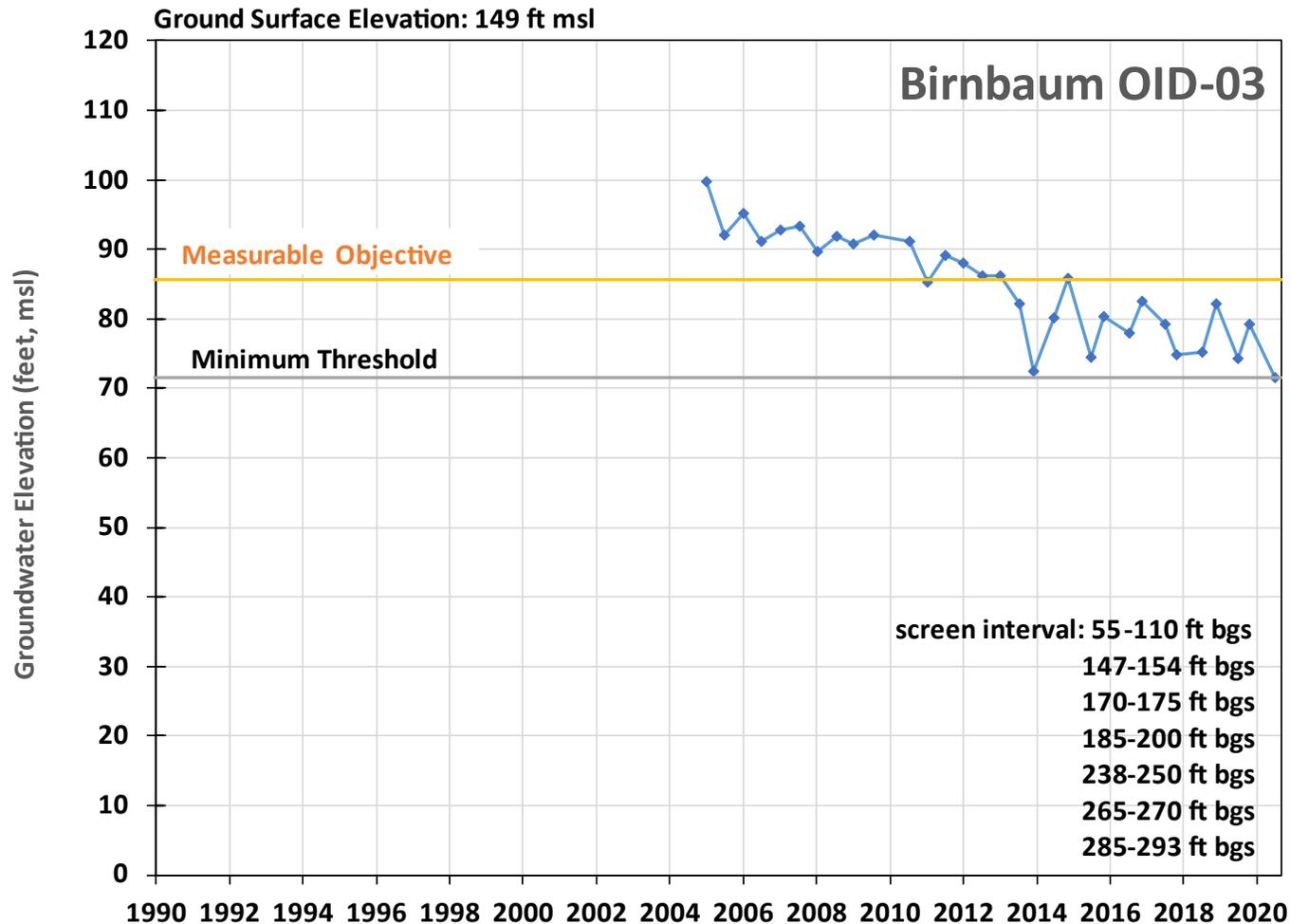
- Historic low levels during recent drought conditions
- Use other nearby wells to check reasonableness of criteria when records are incomplete



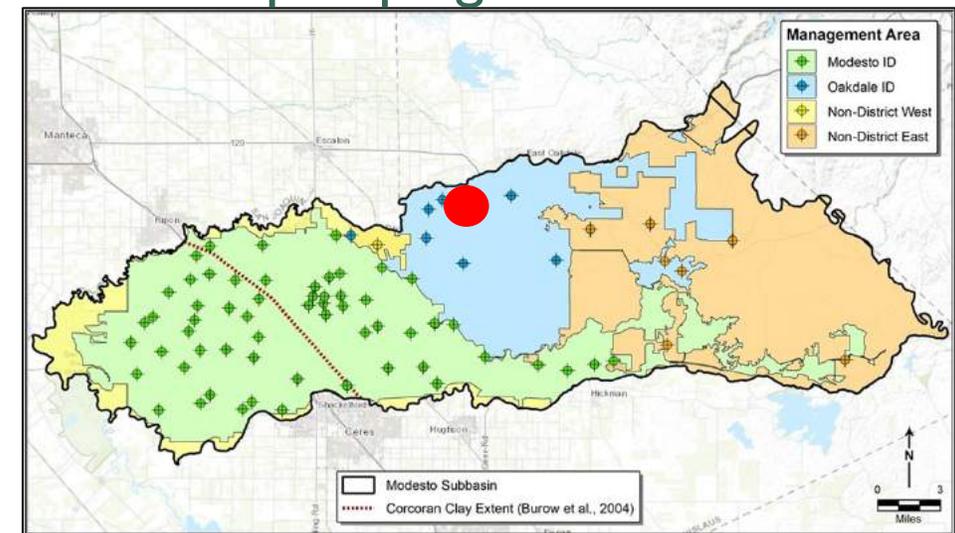


# MINIMUM THRESHOLDS & MEASURABLE OBJECTIVES

## OAKDALE ID MANAGEMENT AREA



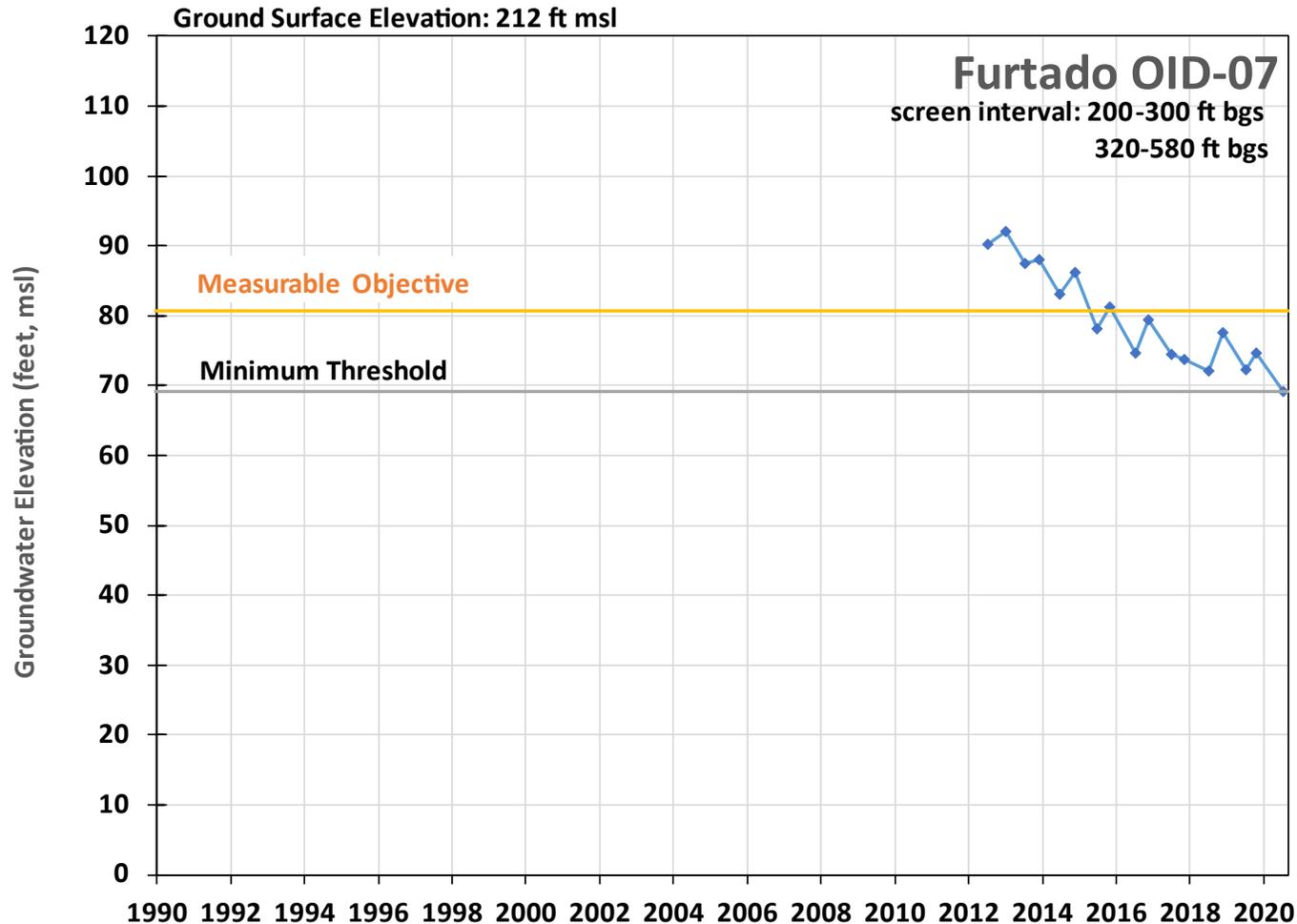
- Water level declines 2005 to 2014; no significant declines since 2014
- Larger seasonal fluctuations after 2014 may indicate an active pumping well



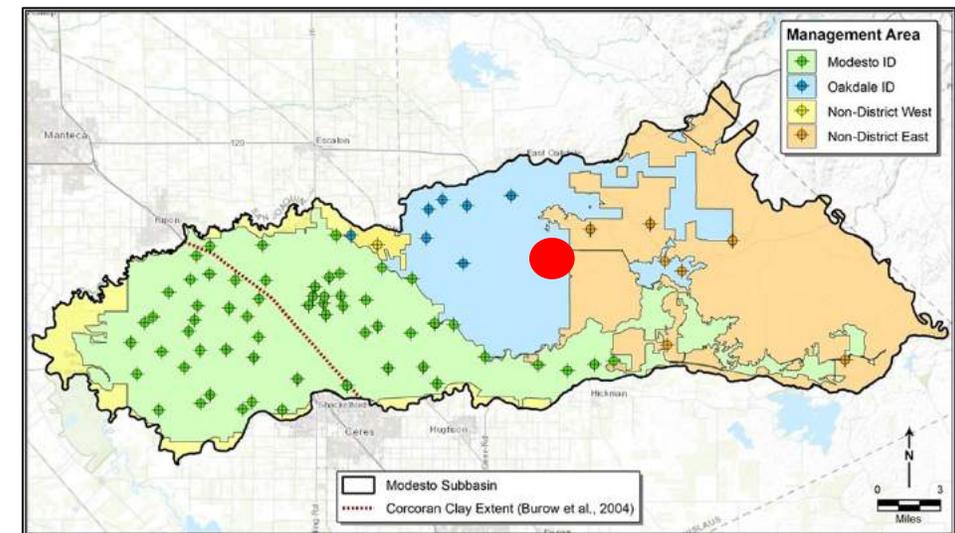


# MINIMUM THRESHOLDS & MEASURABLE OBJECTIVES

## OAKDALE ID MANAGEMENT AREA



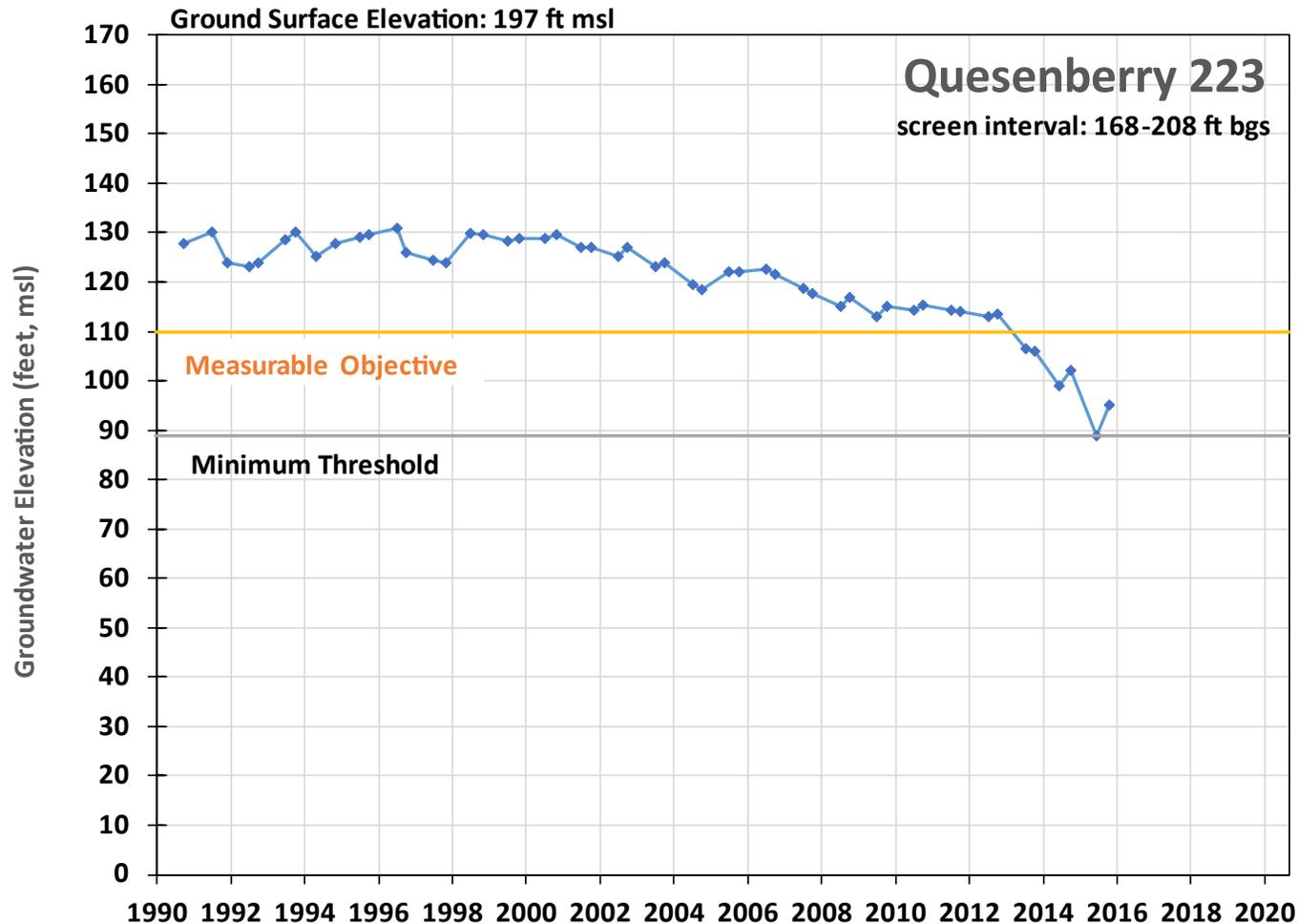
- Rate of decline likely influenced by both recent drought conditions and pumping in Non-District East MA



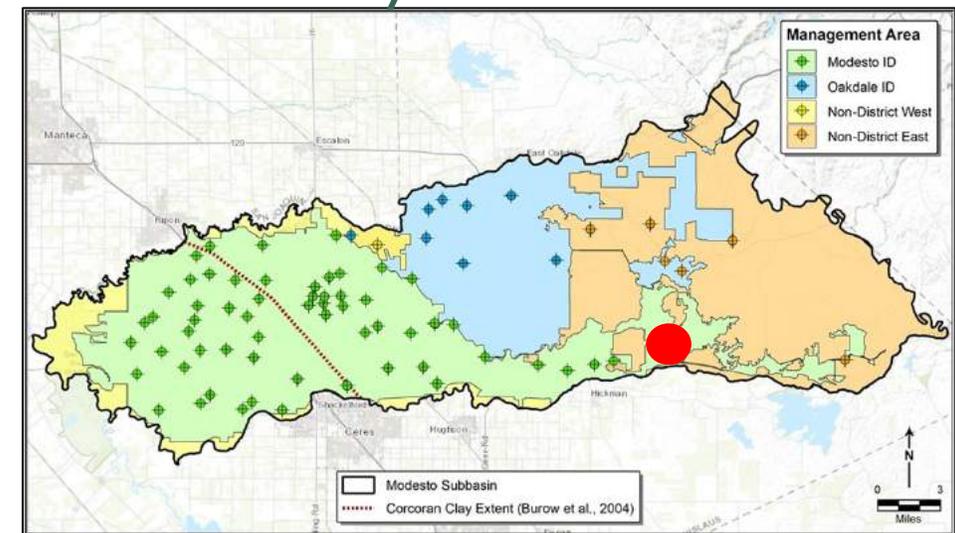


# MINIMUM THRESHOLDS & MEASURABLE OBJECTIVES

## NON-DISTRICT EAST MANAGEMENT AREA

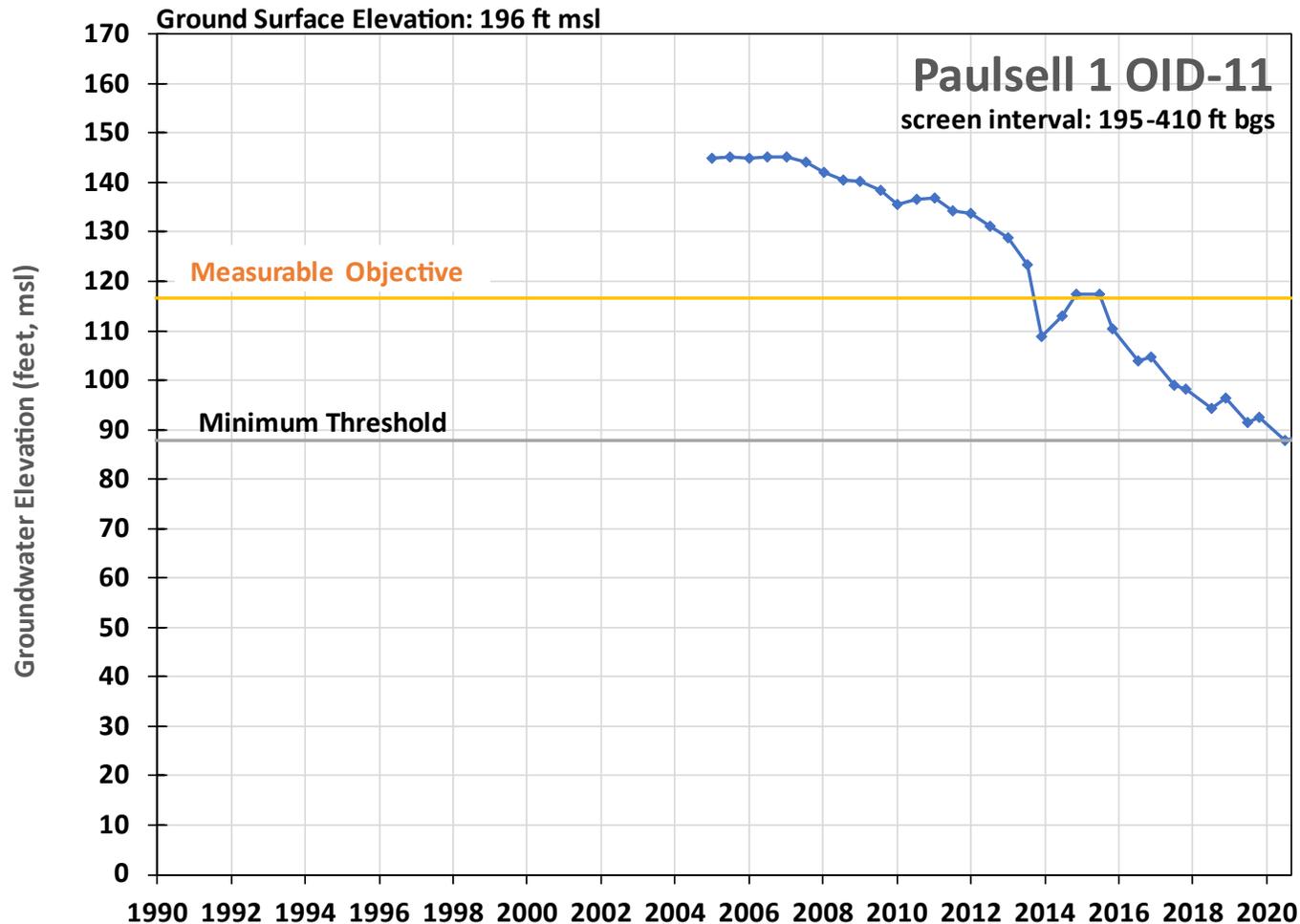


- Incomplete record; well currently inaccessible
- Considering possible steps to re-instate monitoring
- Reasonable MT/MO based on other nearby wells

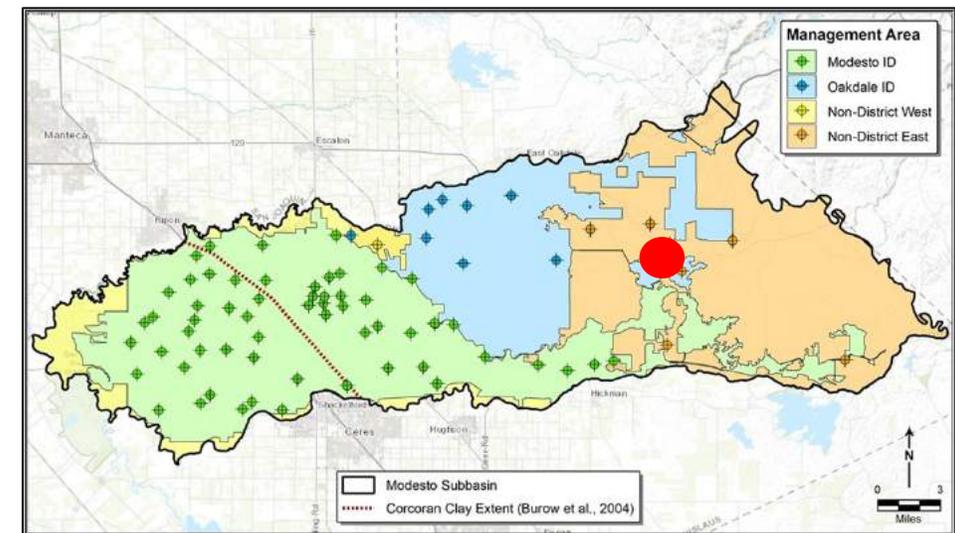




# MINIMUM THRESHOLDS & MEASURABLE OBJECTIVES NON-DISTRICT EAST MANAGEMENT AREA



- Largest overall rate of decline – about 40 feet since 2013 (5'/year)
- Adjacent to areas without reliable surface water supplies



# NEXT STEPS

- Select additional Sustainable Management Criteria
  - Interconnected Surface Water
  - Land Subsidence
- Update/develop List of Projects and Management Actions



# MEMBER AGENCY TASKS



- **Before July GSA Meeting:**
  - Work with respective Board/Council as necessary to take action at the July GSA meeting on sustainable management criteria for the *Chronic Lowering of Water Levels* (MO, MT, & UR).
  - Discuss project/management action list to provide feedback and any additional projects for inclusion in GSP.
  - Management Area representative(s) to discuss and consider other candidate projects or management actions from the members of the public for potential inclusion in GSP.