

Notice and Agenda of a Meeting of the Yucaipa Sustainable Groundwater Management Agency

Workshop

Wednesday, September 22, 2021 at 10:30 a.m.

(909) 797-2489 | www.yucaipasgma.org

Due to the spread of COVID-19 and in accordance with the Governor's Executive Order N-29-20, this meeting will be conducted by teleconference only. There will be no location available to attend this meeting in person.

**This meeting is available by calling
(888) 788-0099 using Meeting ID 895-6292-0203#**

View the meeting online at
<https://sbvmwd.zoom.us/j/89562920203>

-
- I. Call to Order**
 - II. Roll Call**
 - III. Public Comments** At this time, members of the public may address the representatives of the Yucaipa Groundwater Sustainability Agency on matters within its jurisdiction.
 - IV. Correspondence**
 - A. None
 - V. Review and Approval of Minutes**
 - A. The minutes from the workshops on August 11, 2021 and August 25, 2021 will be presented at the board meeting on October 27, 2021 for review and consideration.
 - VI. Discussion Items**
 - A. Status Update on the Activities Related to the Preparation of the Groundwater Sustainability Plan
 - 1. Discussion Regarding the Inclusion of Well Completion Reports
 - 2. Discussion Regarding the Proposed Management Actions
 - 3. Discussion Regarding the Proposed Accounting for Supplemental Water
 - 4. Discussion Regarding the Proposed Fee Structure
 - B. Discussion Regarding the Release of the Public Draft of the Groundwater Sustainability Plan
 - C. Discussion Regarding the Second Community Engagement Meeting
 - D. Discussion Regarding the Schedule for the Final Preparation of the Groundwater Sustainability Plan
 - VII. Topics for Future Meetings**

- Discussion regarding potential projects to be included in the groundwater model and the Groundwater Sustainability Plan
- Overview of Draft Chapter 1, Draft Chapter 2, Draft Chapter 3, Draft Chapter 4, and Draft Chapter 5
- Development of San Geronio Pass Water Agency replenishment fees.

VIII. Comments by Board of Directors

IX. Announcements - Future Meetings

- A. Wednesday, October 27, 2021 at 10:00 am - **Board Meeting**
- B. Wednesday, January 26, 2022 at 10:00 am - **Board Meeting**

X. Adjournment

Roll Call - Board of Directors

	Present	Primary Representative	Present	Alternative Representative
Purveyors				
South Mesa Water Company		David Armstrong		George Jorritsma
South Mountain Water Company		George Hanson		Rolland Moore
Western Heights Water Company		Mark Iverson		Tim Green
Yucaipa Valley Water District		Joseph Zoba		Jennifer Ares
Municipals				
City of Redlands		Cecilia Griego		Kevin Watson
City of Yucaipa		Ray Casey		Fermin Preciado
Regionals				
San Bernardino Valley MWD		Bob Tincher		Matt Howard
San Gorgonio Pass Water Agency		Lance Eckhart		Thomas Todd
* Quorum of the Board of Directors requires a total of five Purveyor, Municipal, Regional Members				

Stakeholders				
County of Riverside		Steve Horn		Jeff Johnson
County of San Bernardino		Bob Page		- -
City of Calimesa		Bonnie Johnson		

Future Dates and Milestones

The dates provided below are subject to change.

Public Presentation of the Goals and Objectives of the Groundwater Sustainability Plan - Meeting Number 3	To be determined
Distribution of the Administrative Draft of the Yucaipa SGMA Groundwater Sustainability Plan	To be determined
Final Groundwater Sustainability Plan Submitted to the Department of Water Resources for Review and Approval	To be determined
Groundwater Sustainability Plan Legislative Deadline	January 31, 2022

DRAFT – SUBJECT TO REVISION

Yucaipa-SGMA

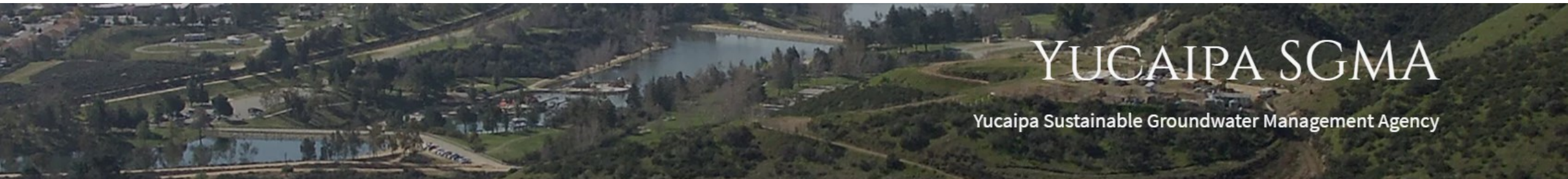
Groundwater Sustainability Plan (GSP)

Development

Yucaipa GSA Workshop
September 22, 2021

Presentation Outline

- Administrative Draft is Available to Review
 - Discuss Inclusion of Well Completion Reports in GSP
 - Discuss Proposed Management Actions
 - Discuss Proposed Accounting of Supplemental Water
 - Discuss Estimated Costs per Member in Chapter 5
- Detailed Schedule for Final Preparation of GSP
 - Release Public Draft of GSP
 - Discuss 2nd Community Engagement Meeting Schedule
 - Resolutions by Agencies to Adopt GSP

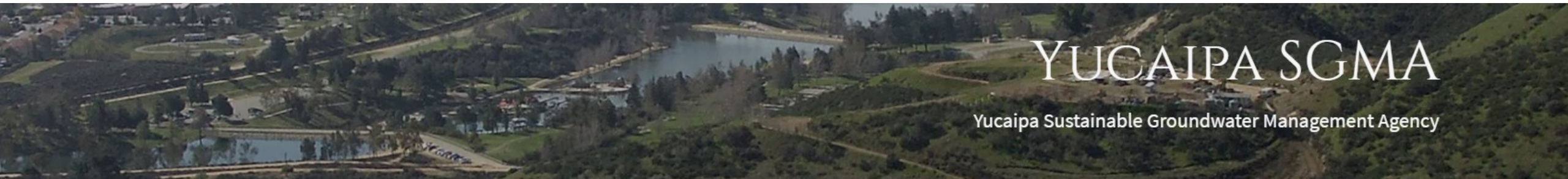


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Lithology Logs in Appendix 3-A

- Lithology in Well Completion Reports
 - Referenced to support observation of no prominent clay that may cause land subsidence when dewatered
 - Do we want to include well completion reports with well owner information in Appendix 3-A?
 - Not required in GSP
 - WCR publicly available via DWR website
 - Identity of well owner is redacted



Example of Well Completion Report

ORIGINAL
File with DWR

Page 1 of 2

Owner's Well No. 57

Date Work Began 1-18-01, Ended 7-30-02

Local Permit Agency San Bernardino Environmental Health Services

Permit No. 2001010029 Permit Date 1-18-01

STATE OF CALIFORNIA WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **788723**

DWR USE ONLY — DO NOT FILL IN

STATE WELL NO./STATION NO.									
LATITUDE					LONGITUDE				
APN/TRS/OTHER									

GEOLOGIC LOG

ORIENTATION ($\angle$) ☒ VERTICAL ☐ HORIZONTAL ☐ ANGLE ☐ (SPECIFY)

DRILLING
METHOD

Reverse Circulation FLUID Poly Bore

DESCRIPTION

Describe material, grain size, color, etc.

DEPTH FROM
SURFACE
Ft. to Ft.

40	130	sand & gravel
130	140	coarse gravel, sand, rock
140	160	sand, gravel, & rock
160	170	sand
170	180	gravel, sand, & rock
180	190	sand and small gravel
190	200	sand, some short cut gravel
200	210	sand, little clay, & gravel
210	230	sand with clay and small gravel
230	240	sand and gravel
240	250	sand and small gravel
250	260	sand, gravel, and different colors
260	270	sand, gravel, & granite
270	280	sand, gravel, sharp cuttings
280	290	sand and gravel
290	300	sand and large gravel
300	310	sand and medium sharp
310	320	sand and gravel
320	330	sand and gravel (fine sharp)
330	390	sand and gravel
390	410	sand and medium gravel
410	420	gravel and rock
420	440	sand and gravel
440	450	large gravel and different colors
450	470	sand and gravel
470	480	granite and gravel

WELL LOCATION

Address 100' South of Oak Glen Rd. 250' West Chapman

City Yucaipa

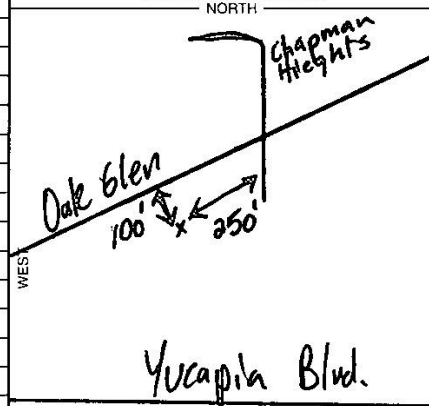
County San Bernardino

APN Book 0303 Page 131 Parcel 66

Township 1S Range 2W Section 35

Latitude DEG. MIN. SEC. NORTH Longitude DEG. MIN. SEC. WEST

LOCATION SKETCH



ACTIVITY ($\angle$)

☒ NEW WELL

MODIFICATION/REPAIR
☐ Deepen
☐ Other (Specify)

☐ DESTROY (Describe
Procedures and Materials
Under "GEOLOGIC LOG")

PLANNED USES ($\angle$)

WATER SUPPLY

☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial

MONITORING ☐

TEST WELL ☒

CATHODIC PROTECTION ☐

HEAT EXCHANGE ☐

DIRECT PUSH ☐

INJECTION ☐

VAPOR EXTRACTION ☐

SPARGING ☐

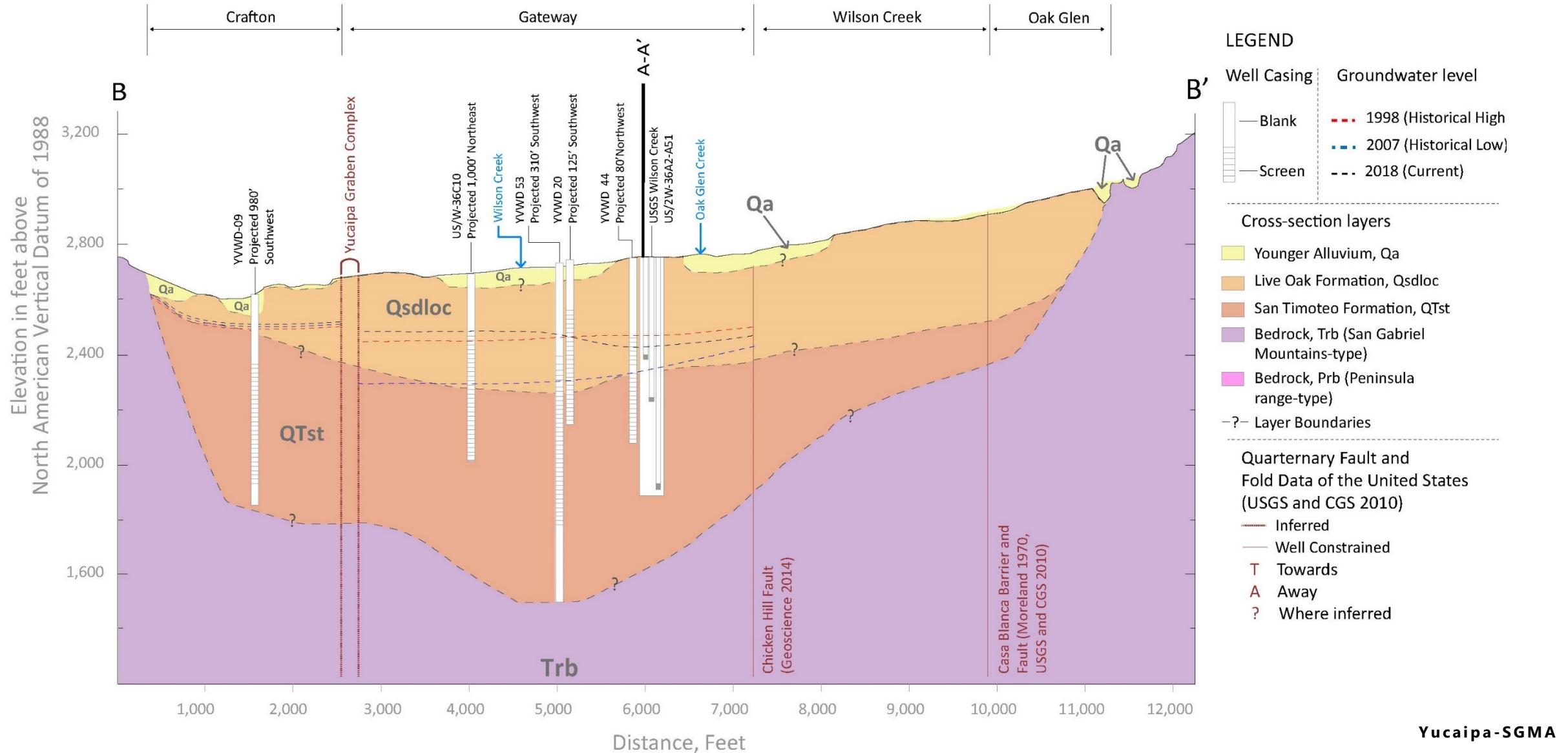
REMEDIATION ☐

OTHER (SPECIFY) ☐

Illustrate or Describe Distance of Well from Roads, Buildings,
Fences, Rivers, etc. and attach a map. Use additional paper if
necessary. PLEASE BE ACCURATE & COMPLETE.

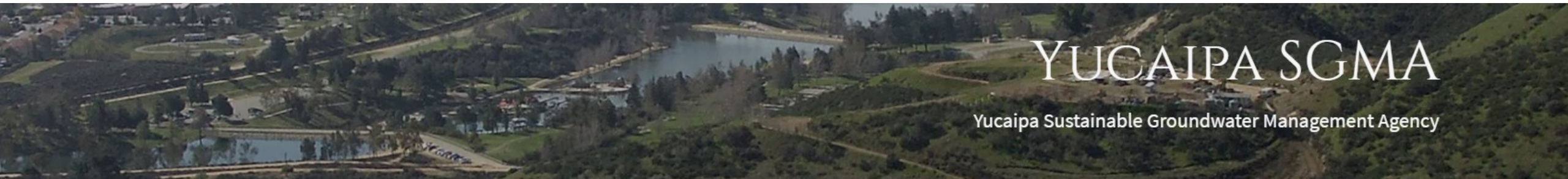
WATER LEVEL & YIELD OF COMPLETED WELL

Cross-Section for Conceptual Hydrogeological Model



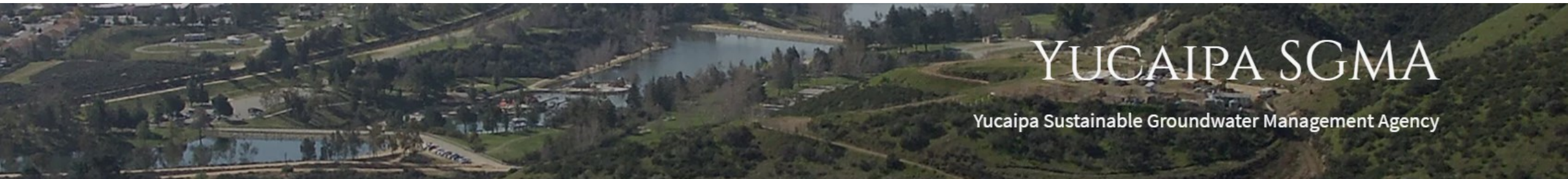
Discuss Proposed Management Actions

- Shift Measurable Objective to Historical Low in Calimesa and Western Heights Management Areas
- MA #1 = Reduce Net Loss of Groundwater When Levels Fall Below Measurable Objective
- Implement MA #1 when:
 - Levels fall below the respective thresholds at **50% or more** the Representative Monitoring Points (RMP) for **2 consecutive years**



Discuss Proposed Management Actions

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Original Calimesa Management Area Sustainability Criteria

Sustainability Range

Purchase of Supplemental Water and/or Pumping Reduction **Optional** because basin can recover on its own

Measurable Objective 1 @ 800,000 AF

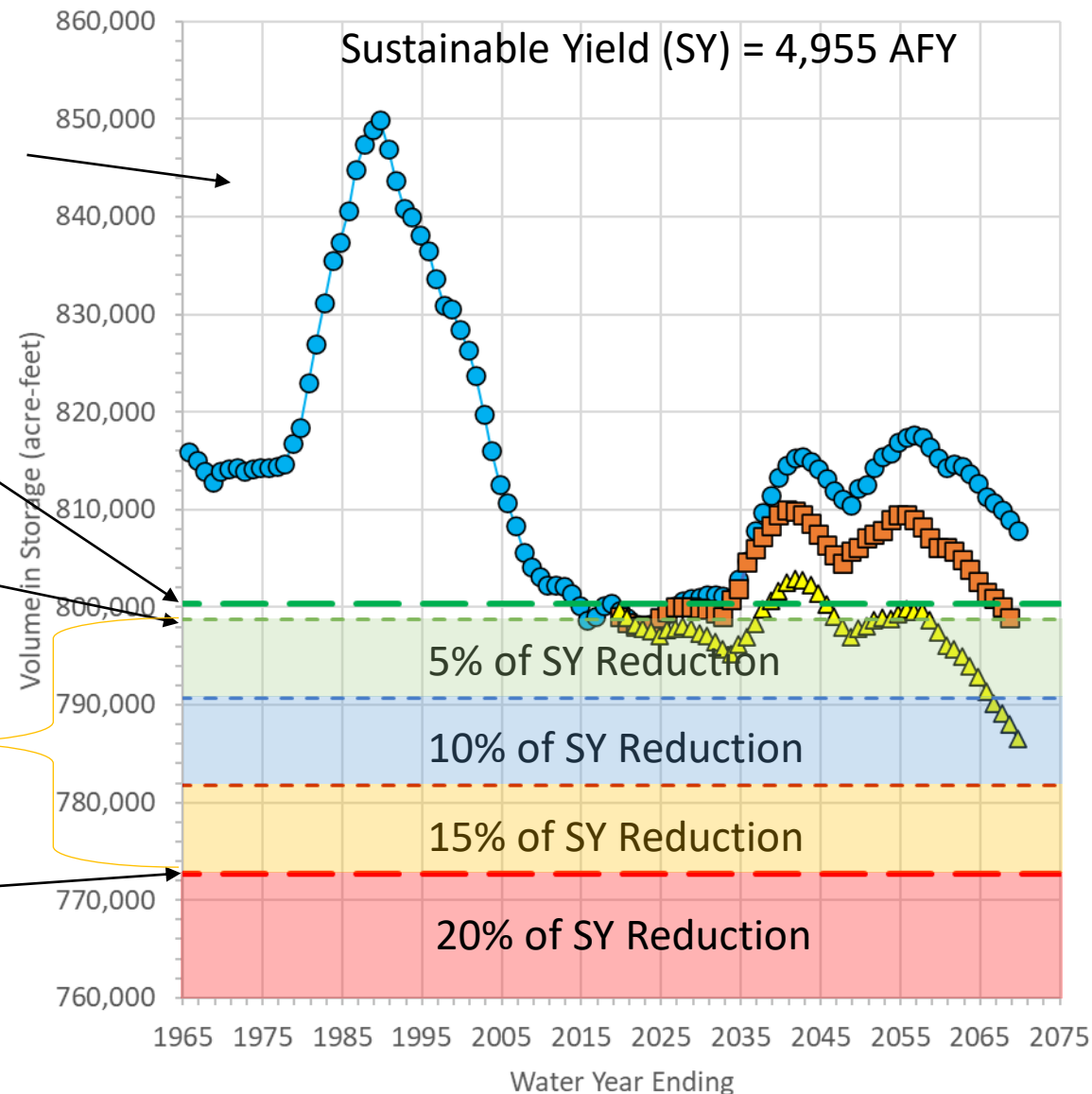
Historical Low
@ 798,600 AF

Drought Buffer Range

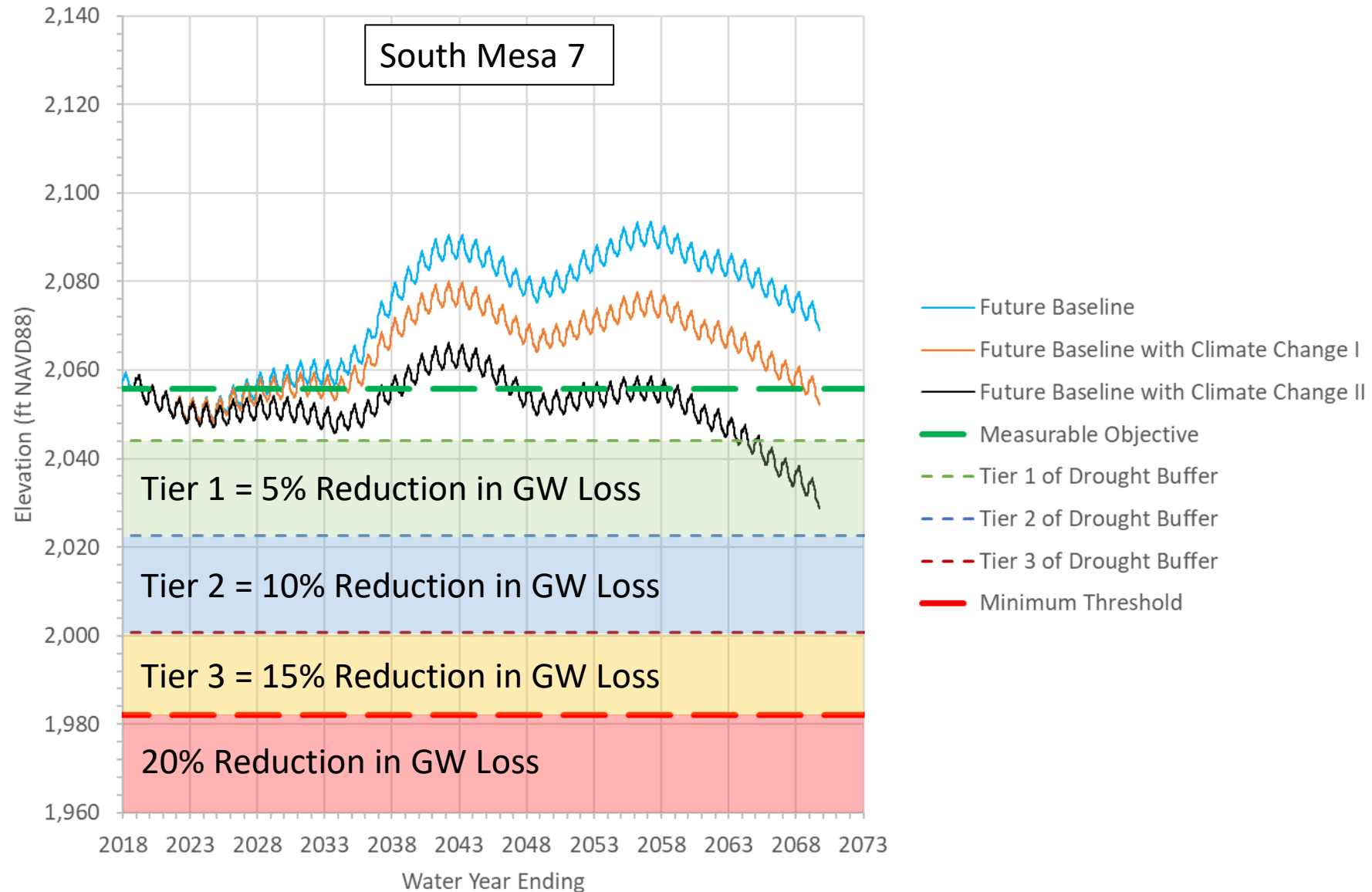
Management Action: Purchase Supplemental Water and/or Reduce Pumping by 5% to 15% of SY

Minimum Threshold

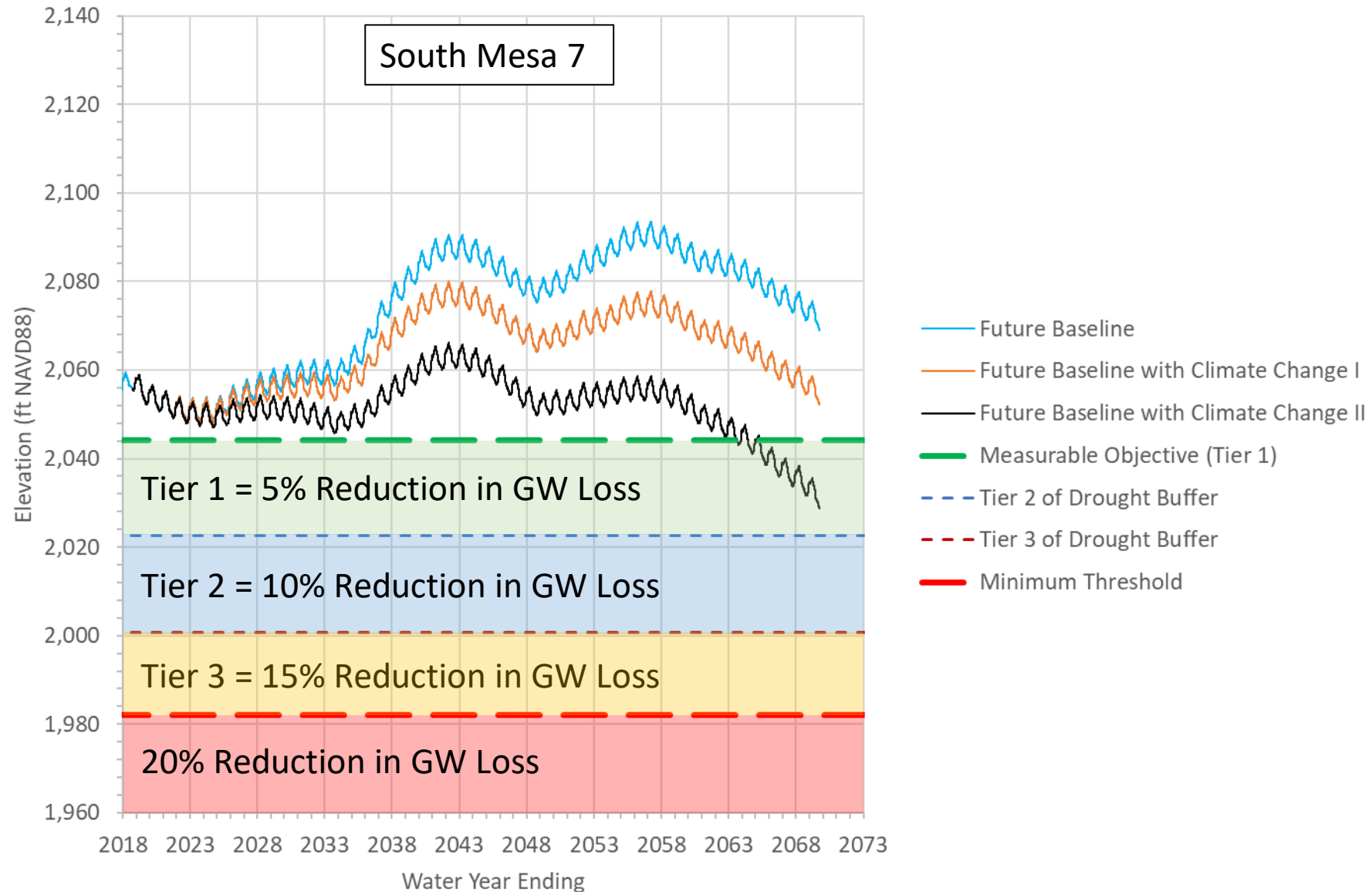
Management Action: Purchase Supplemental Water and/or Reduce Pumping 1,240 AFY (20% of SY)



Original Measurable Objective in Calimesa Management Area



Shift Measurable Objective to Historical Low



Final Calimesa Management Area Sustainability Criteria

Sustainability Range

Purchase of Supplemental Water and/or Pumping Reduction **Optional** because basin can recover on its own

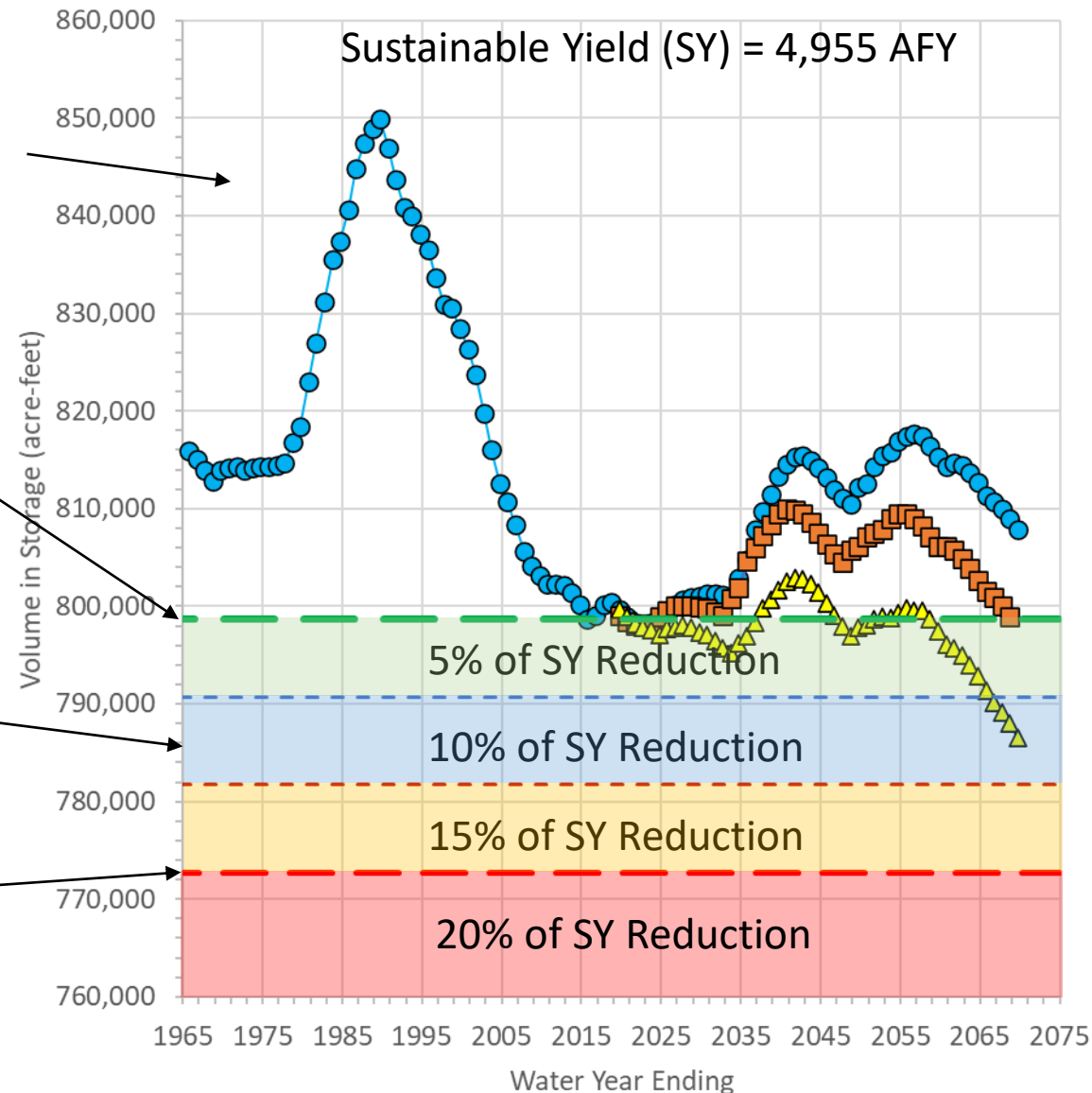
Measurable Objective 1 @ 798,600 AF

Drought Buffer Range

Management Action: Purchase Supplemental Water and/or Reduce Pumping by 5% to 15% of SY

Minimum Threshold

Management Action: Purchase Supplemental Water and/or Reduce Pumping 1,240 AFY (20% of SY)



- Historical and Future Baseline
- Future Baseline with Climate Change I
- ▲ Future Baseline with Climate Change II
- Measurable Objective
- - - Tier 2 of Drought Buffer
- - - Tier 3 of Drought Buffer
- Minimum Threshold

Original Western Heights Management Area Sustainability Criteria

Sustainable Yield (SY)
= 1,764 AFY

Normal Operating Range

Purchase of Supplemental Water and/or Pumping Reduction **Optional** because basin can recover on its own

Measurable Objective: Sustainability Goal @ 409,500 AF

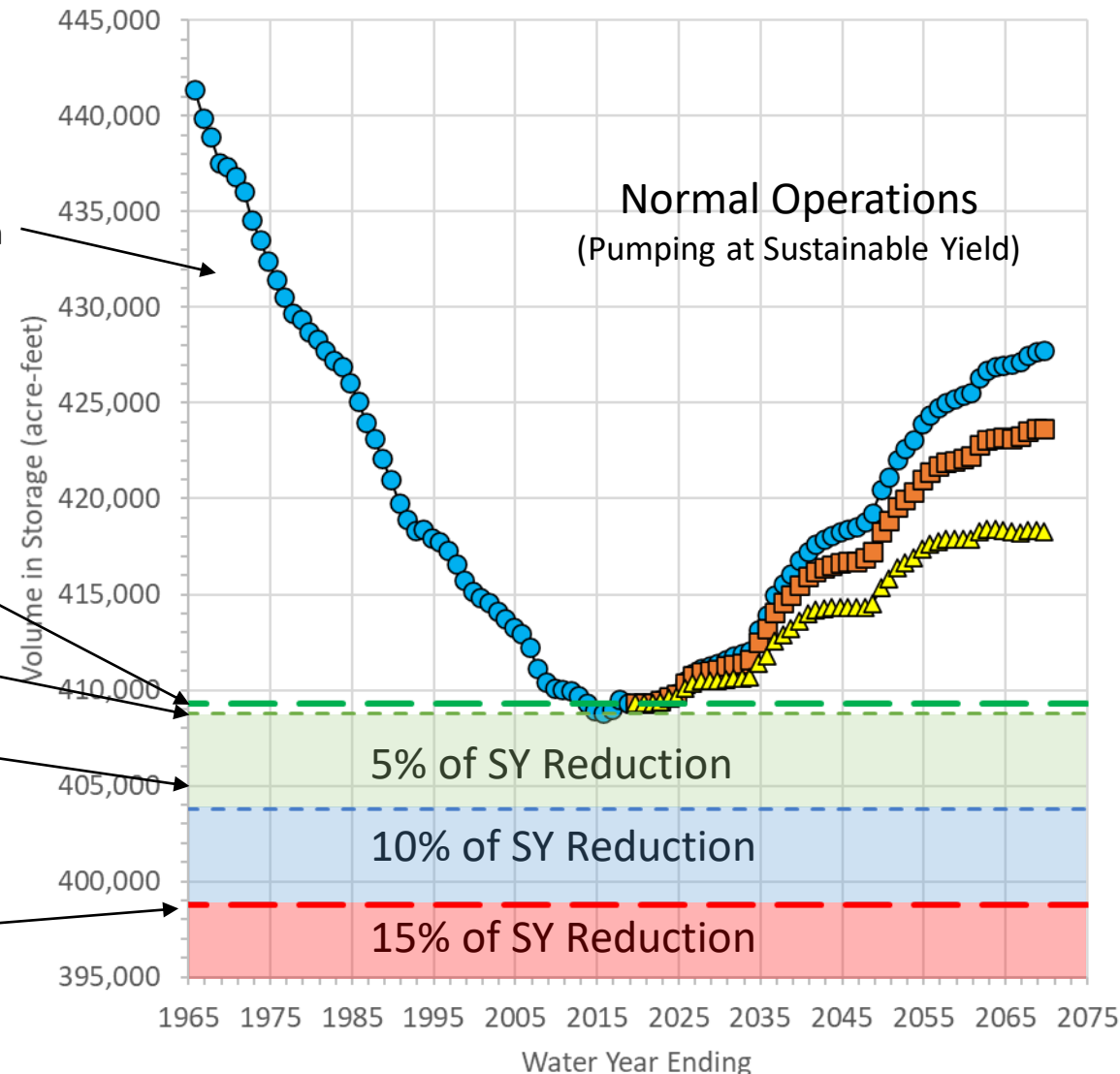
Historical Low @ 408,800 AF

Drought Buffer Zone

Management Action: Purchase Supplemental Water and/or Reduce Pumping by 5% to 10% of SY

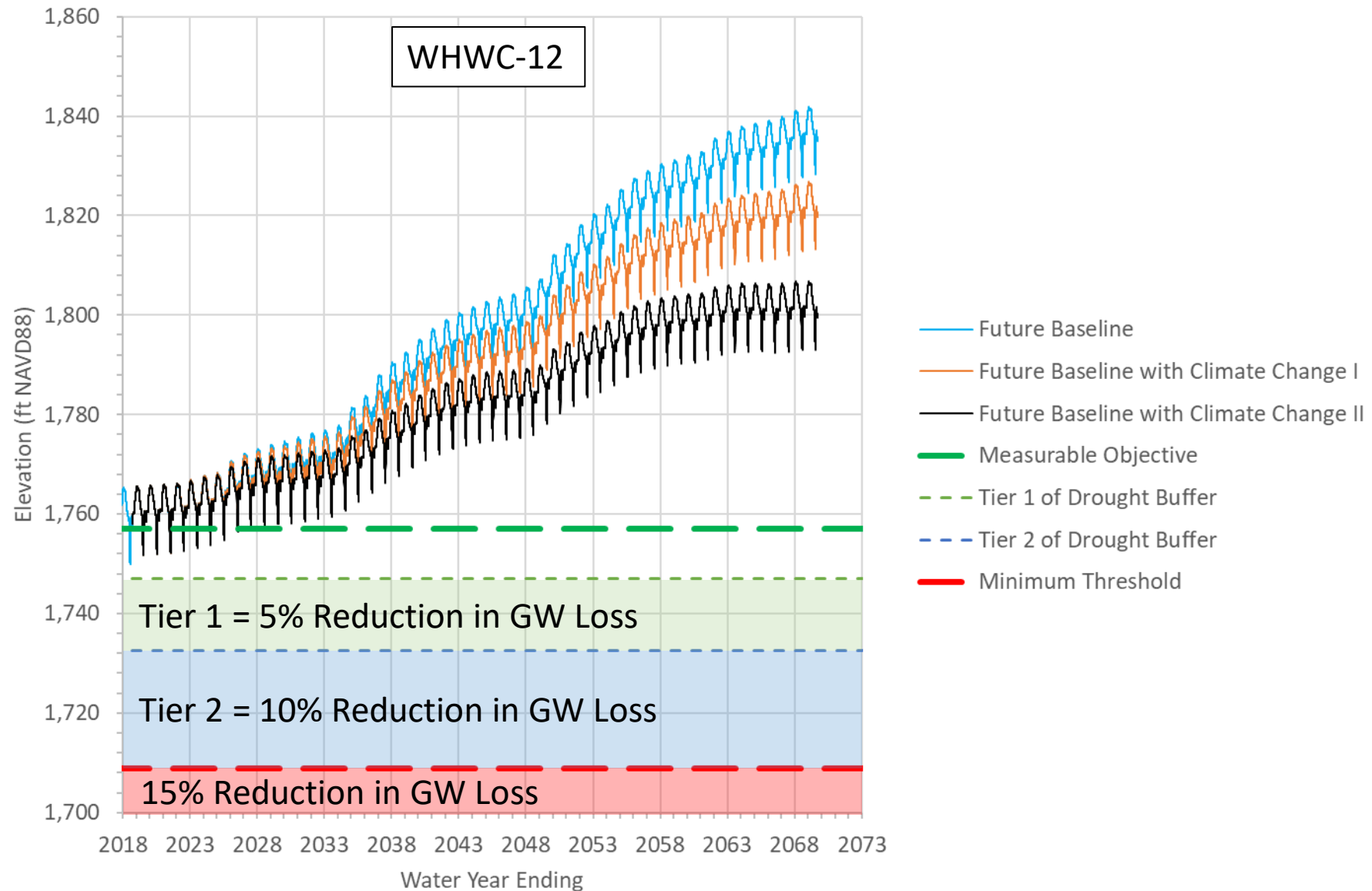
Minimum Threshold

Management Action: Purchase Supplemental Water and/or Reduce Pumping by 15% of SY

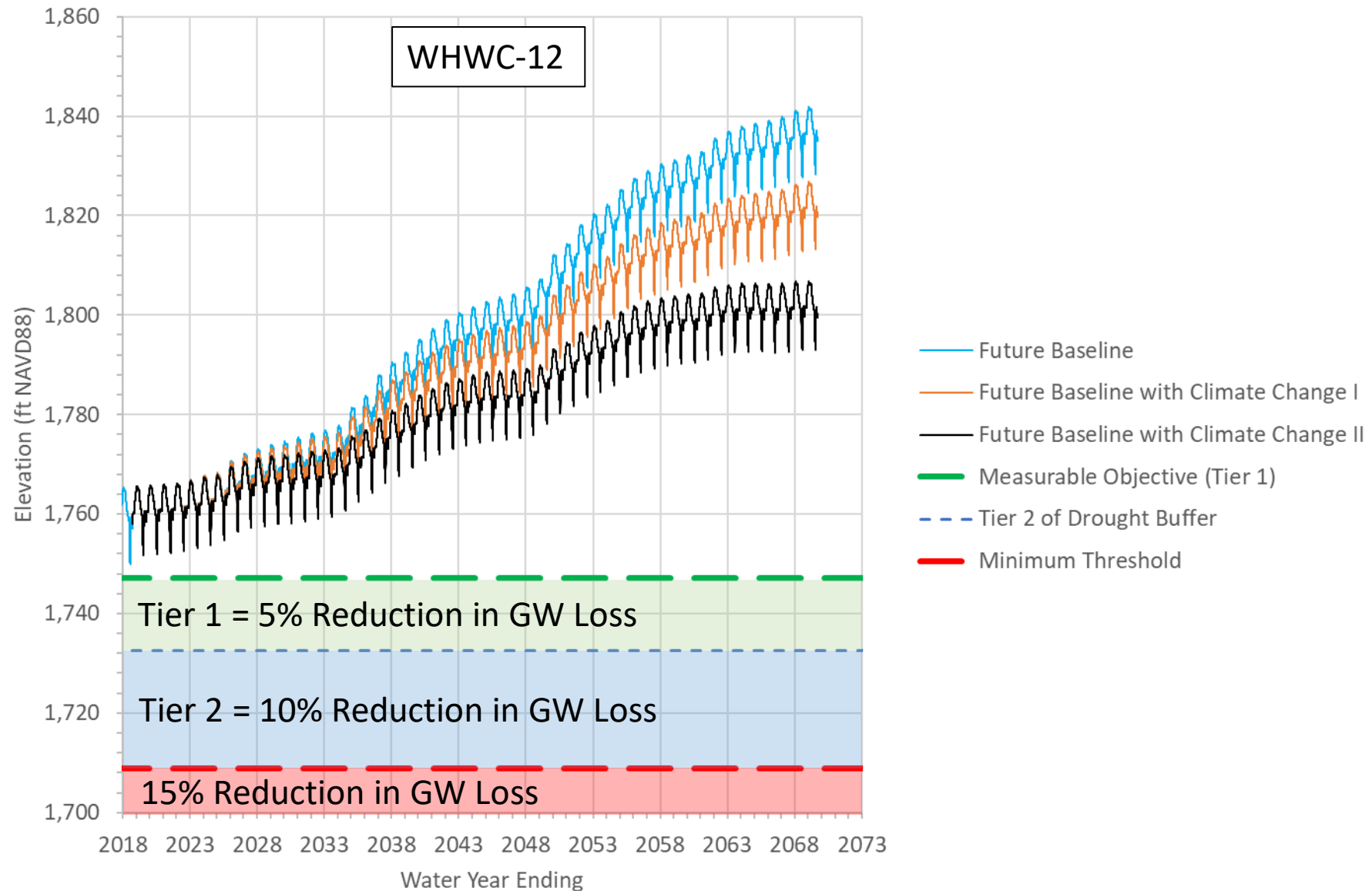


- Historical and Future Baseline
- Future Baseline with Climate Change I
- ▲ Future Baseline with Climate Change II
- Measurable Objective
- - - Tier 1 of Drought Buffer
- - - Tier 2 of Drought Buffer
- - - Minimum Threshold

Original Measurable Objective in Western Heights Management Area



Shift Measurable Objective to Historical Low



Final Western Heights Management Area Sustainability Criteria

Sustainable Yield (SY)
= 1,764 AFY

Normal Operating Range

Purchase of Supplemental Water and/or Pumping Reduction **Optional** because basin can recover on its own

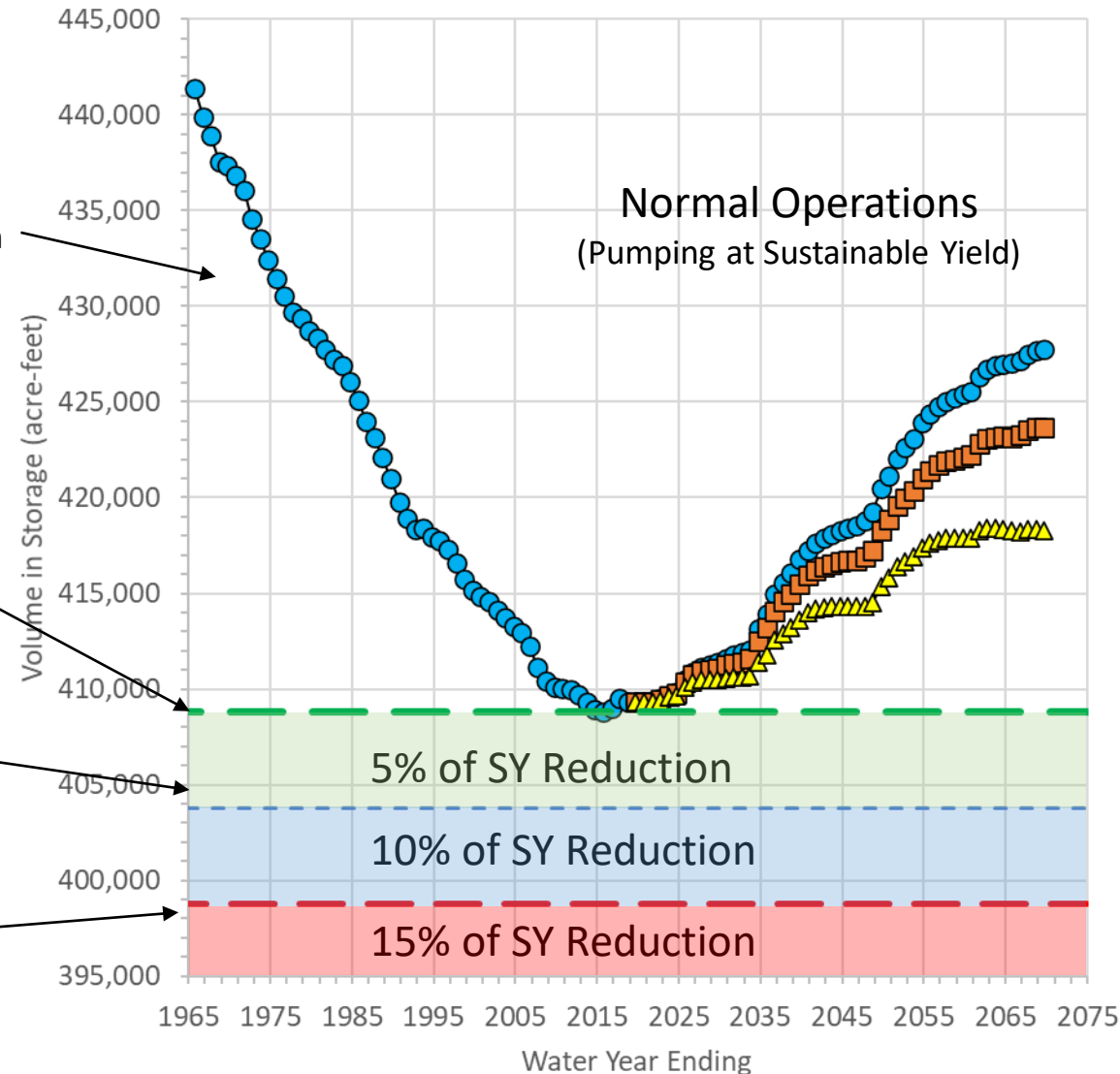
Measurable Objective: Sustainability Goal @ 408,800 AF

Drought Buffer Zone

Management Action: Purchase Supplemental Water and/or Reduce Pumping by 5% to 10% of SY

Minimum Threshold

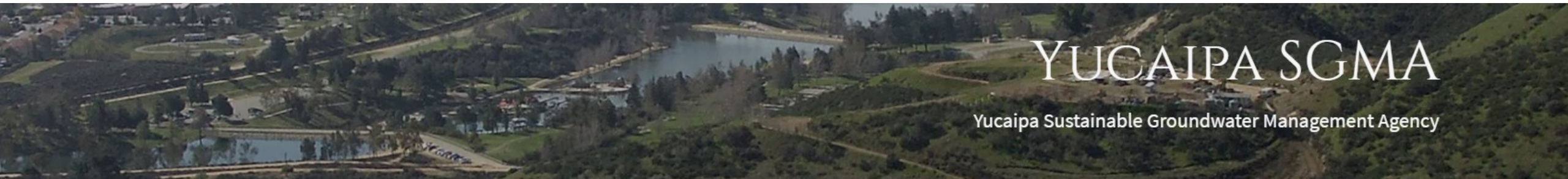
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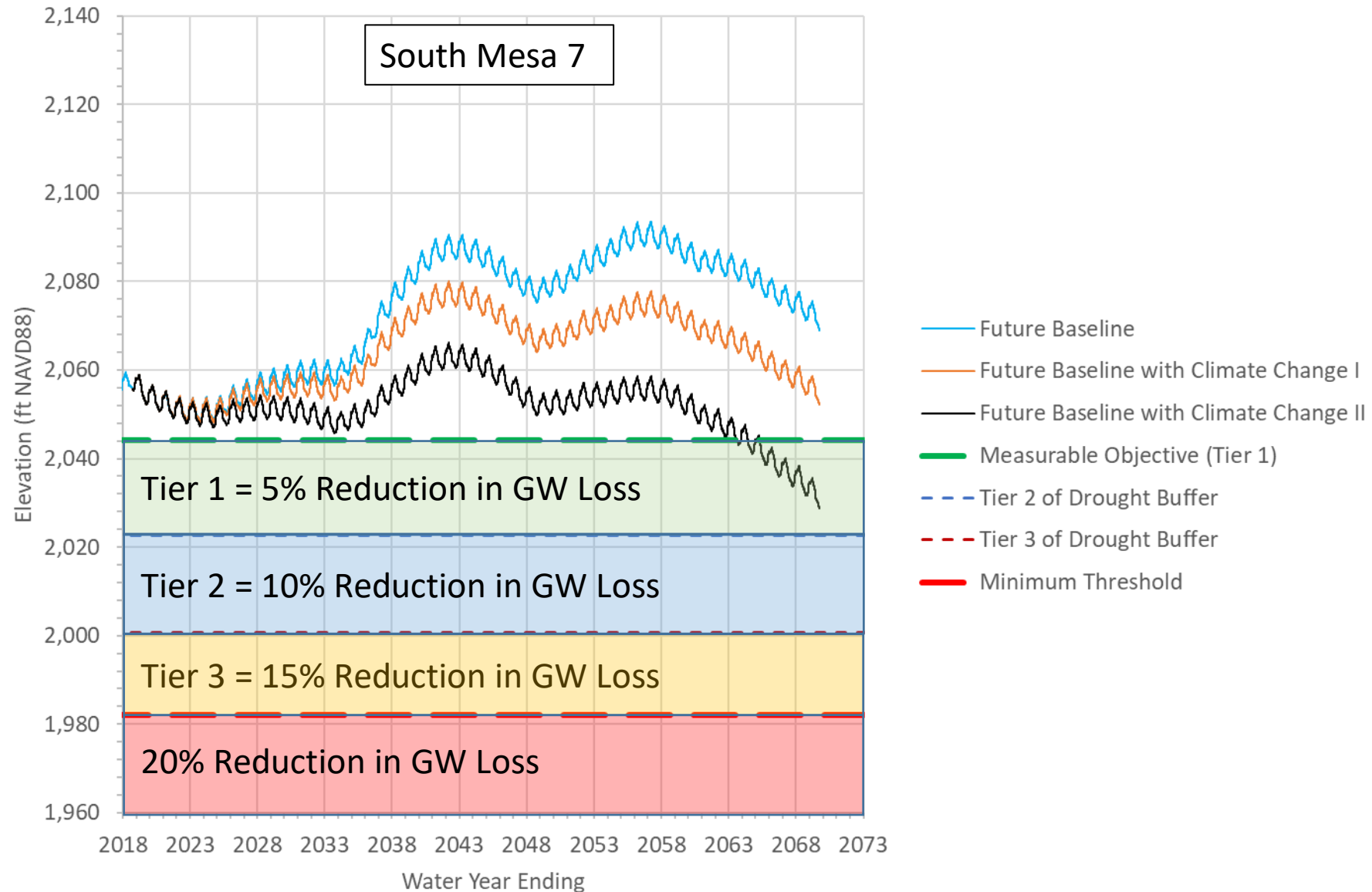
- Historical and Future Baseline
- Future Baseline with Climate Change I
- ▲ Future Baseline with Climate Change II
- Measurable Objective (Tier 1)
- - - Tier 2 of Drought Buffer
- - - Minimum Threshold

Discuss Proposed Management Actions

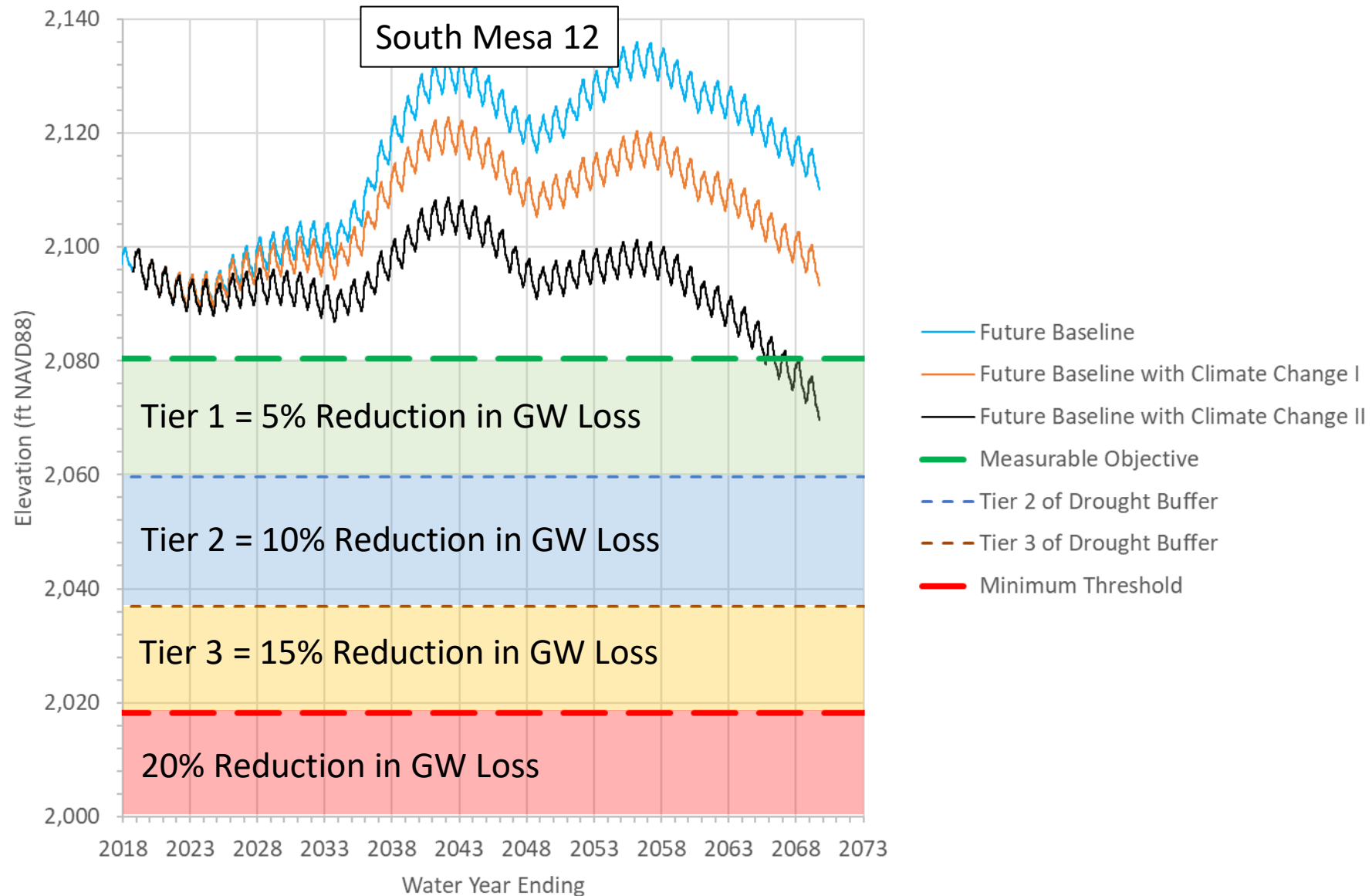
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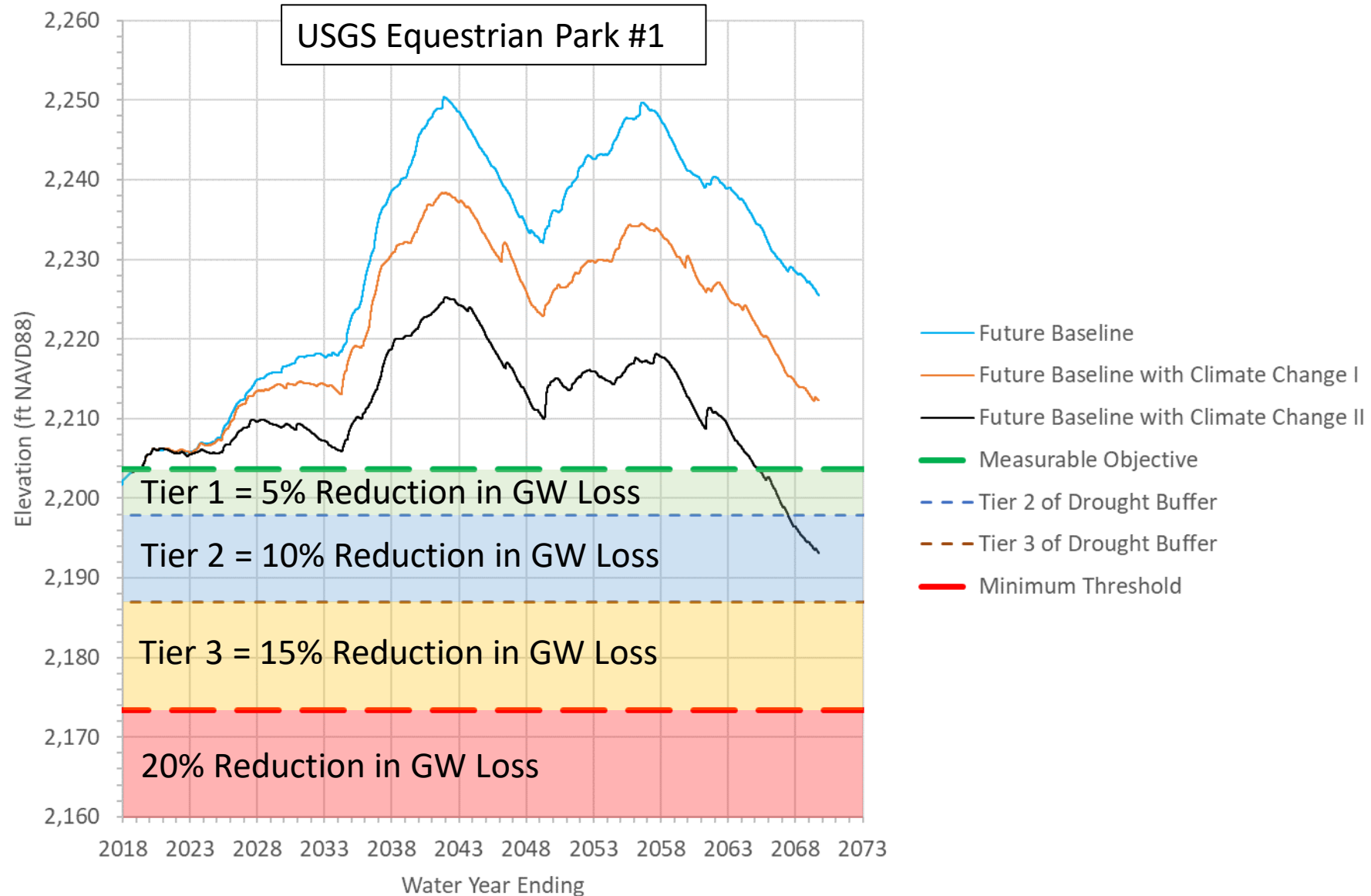
Management Action #1 Example for Calimesa Management Area



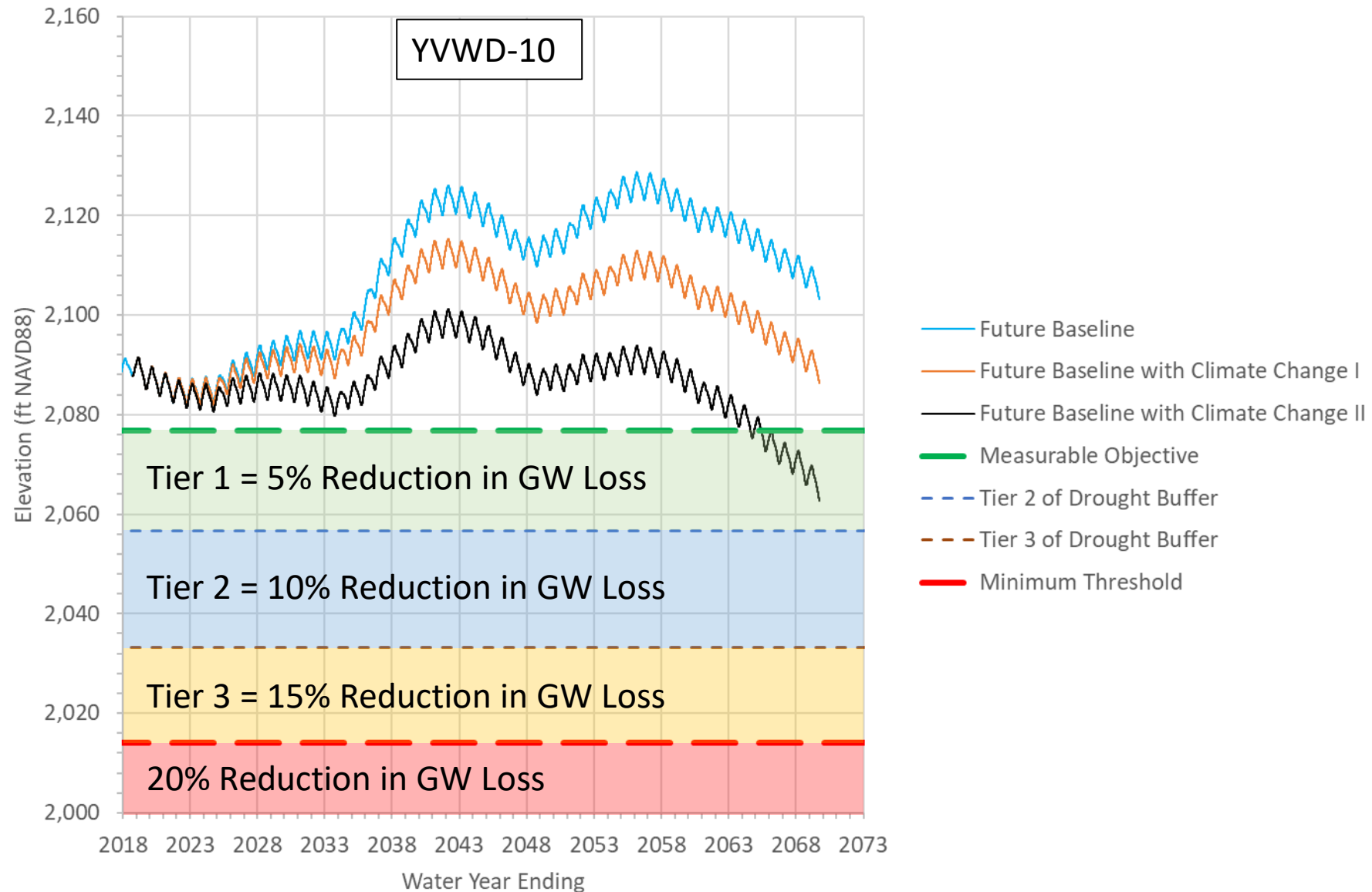
Management Action #1 Example for Calimesa Management Area



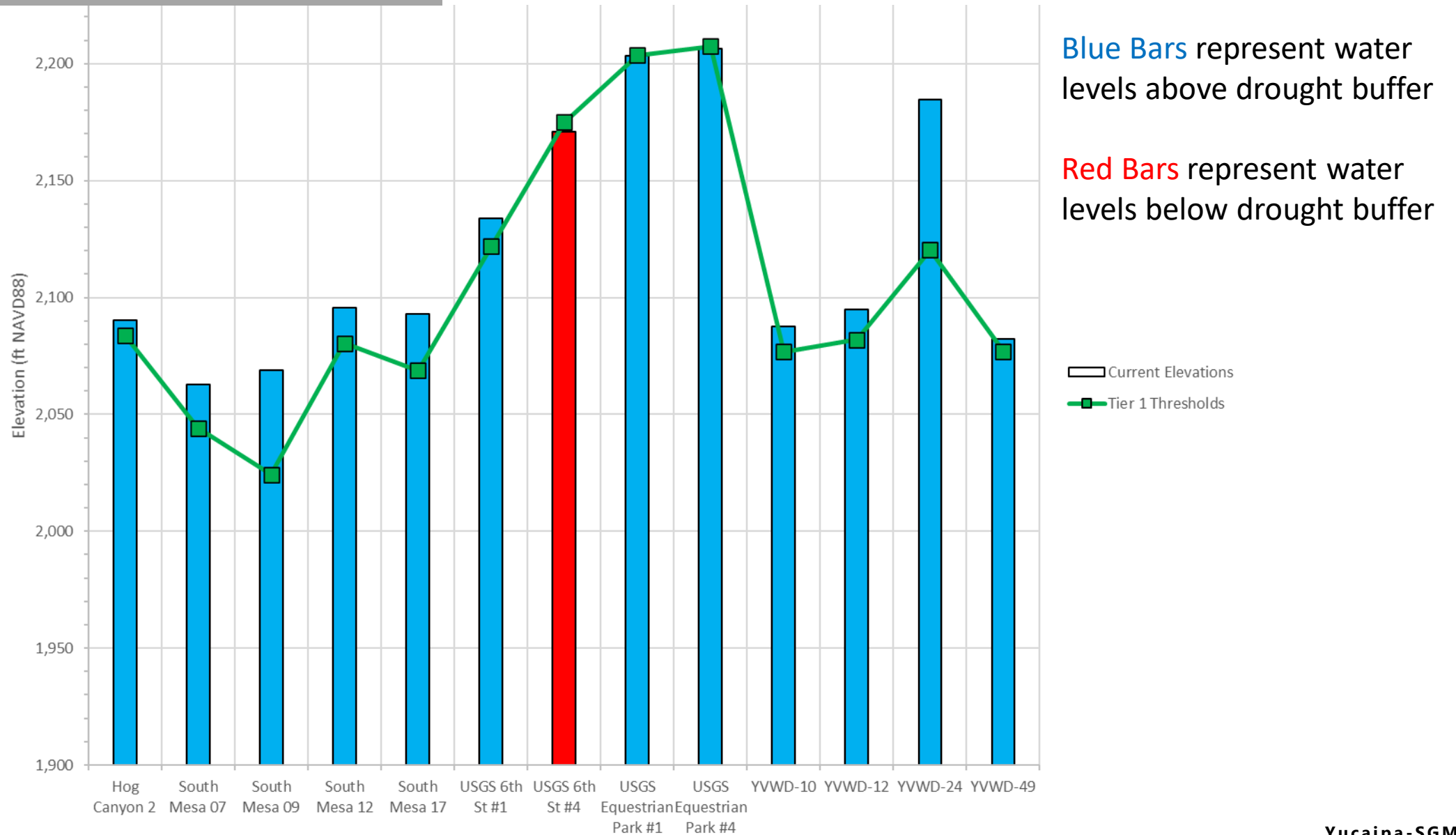
Management Action #1 Example for Calimesa Management Area



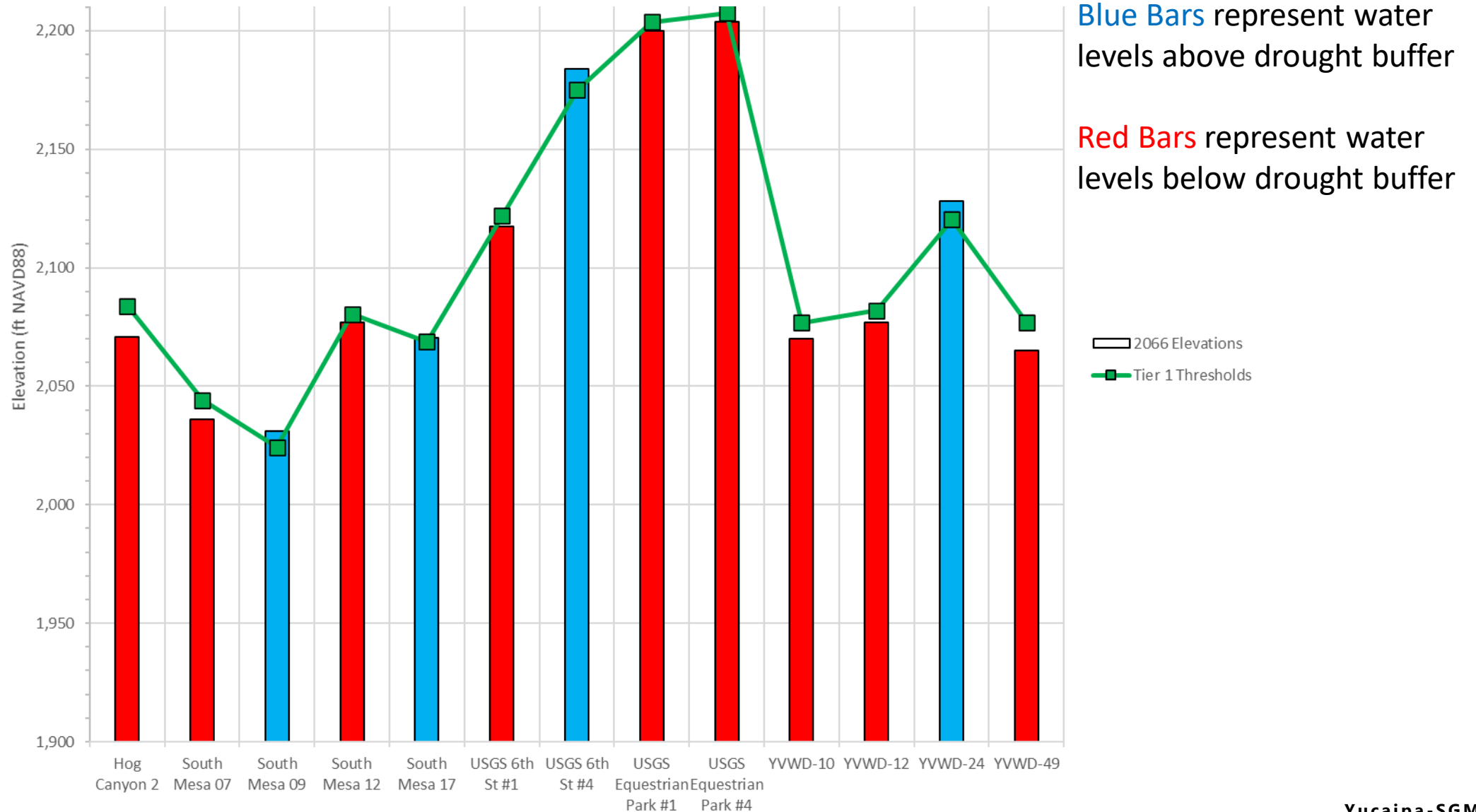
Management Action #1 Example for Calimesa Management Area



RMP in Calimesa Management Area – Current Elevations



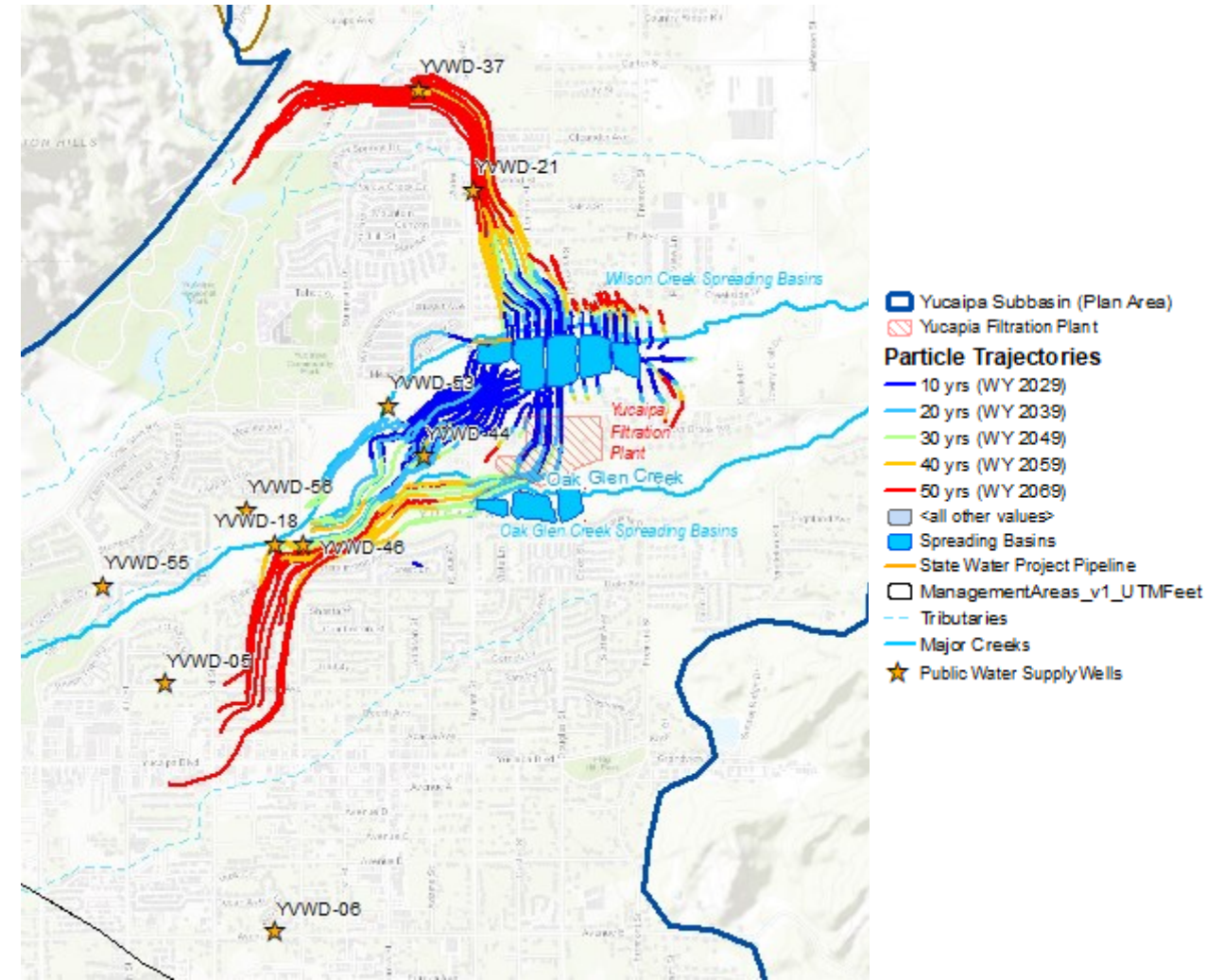
RMP in Calimesa Management Area – 2066 Elevations per Climate Change Scenario II



Supplemental Water Accounting

1. Supplemental Water Accounting

- a) Numerical model indicates that water discharged to spreading basins will remain in management areas for at least 50 years
- b) No annual loss rate applied



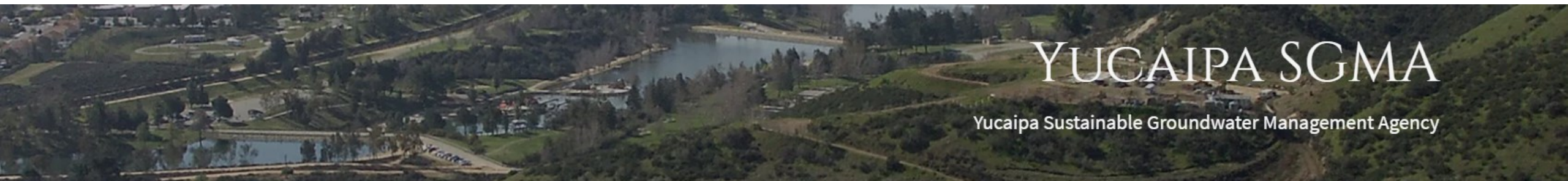
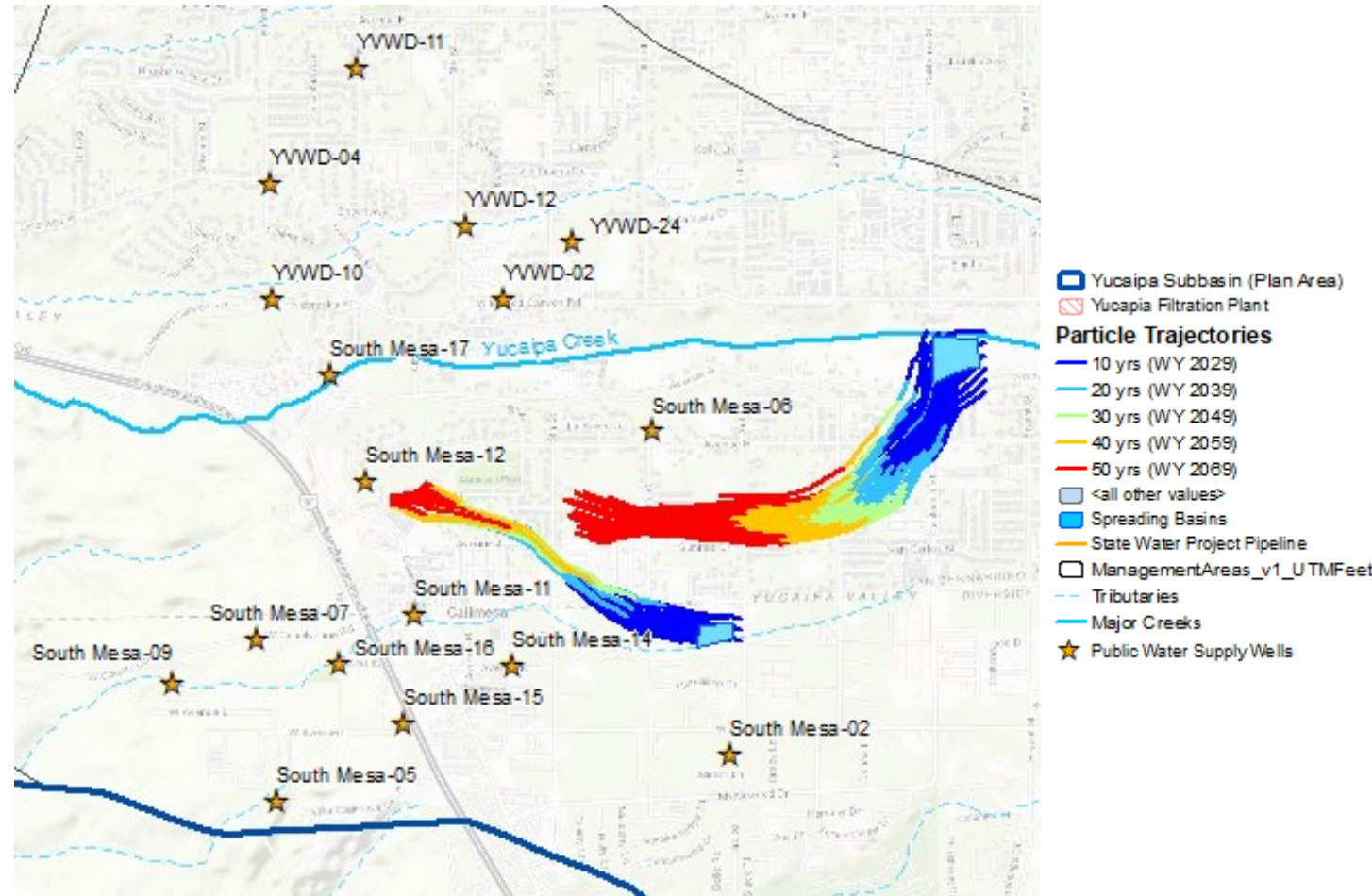
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- a) Numerical model indicates that water discharged to spreading basins will remain in management areas for at least 50 years
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Estimated Annual Upfront Costs

GSP Implementation Task	Estimated Annual Cost	Each Water Purveyor	Each Municipality and Regional
GSA Administrative Costs	\$ 20,000.00	\$ 3,750.00	\$ 1,250.00
Public Engagement	\$ 5,000.00	\$ 937.50	\$ 312.50
GSP Annual Reports	\$ 30,000.00	\$ 5,625.00	\$ 1,875.00
GSP Periodic Evaluations (includes update, refine, recalibrate numerical model)	\$ 40,000.00	\$ 7,500.00	\$ 2,500.00
DMS Management	\$ 5,000.00	\$ 937.50	\$ 312.50
Sub-Total Upfront Costs	\$ 100,000.00	\$ 18,750.00	\$ 6,250.00

Estimated Annual Incurred Costs

GSP Implementation Task	Estimated Annual Cost	Each Water Purveyor	Each Municipality and Regional
Groundwater Level Monitoring (includes installation/maintenance to obtain data, QA/QC, measuring devices)	\$ 15,000.00	\$ 2,812.50	\$ 937.50
Groundwater Production Monitoring (includes installation/maintenance to obtain data, QA/QC, meter calibration)	\$ 10,000.00	\$ 1,875.00	\$ 625.00
Groundwater Quality Monitoring (includes installation/maintenance to obtain data, QA/QC, field meters)	\$ 15,000.00	\$ 2,812.50	\$ 937.50
Installation and Maintenance of Wells in the Monitoring Network	\$ 15,000.00	\$ 2,812.50	\$ 937.50
Installation and Maintenance of Surface Water Gaging Stations	\$ 15,000.00	\$ 2,812.50	\$ 937.50
Sub-Total Incurred Costs	\$ 70,000.00	\$ 13,125.00	\$ 4,375.00

Estimated Annual Costs

1. Upfront Costs Due at Adoption of GSP

- a) Administration Fees
- b) Public Engagement
- c) GSP Annual and 5-Year Reports
- d) DMS Management

Water Purveyors = \$18,750/year each

Municipalities/Regionals = \$6,250/year each

2. Costs Incurred as Implemented

a) Monitoring Programs

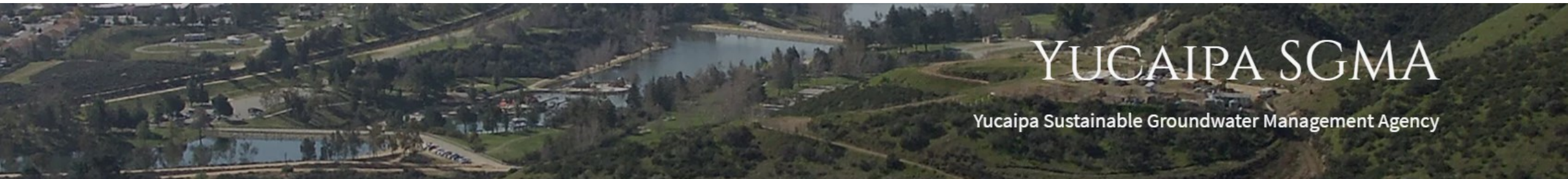
- a) Groundwater levels, production, water quality

b) Installation, Maintenance of Wells, Stream Flow Gaging Stations

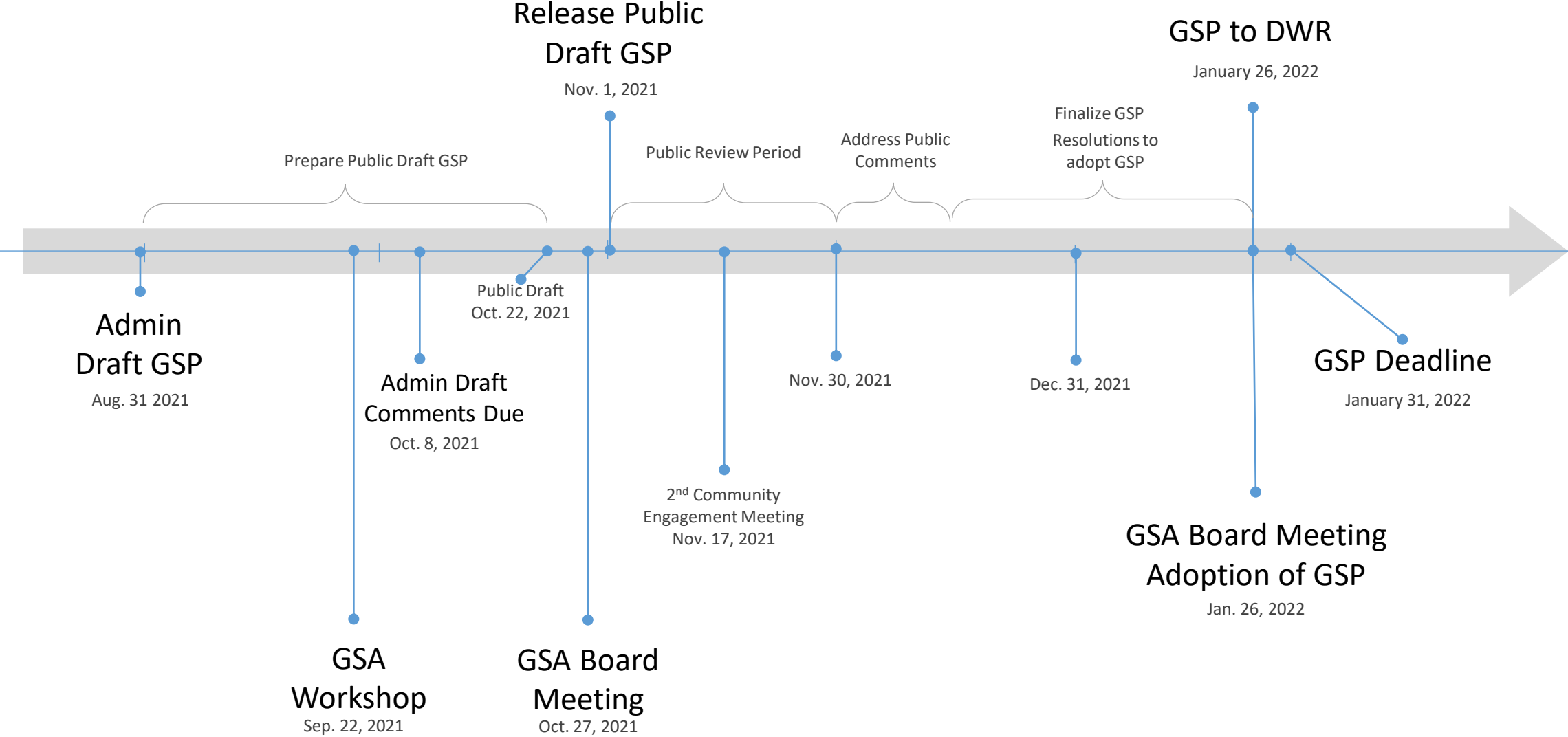
Water Purveyors = \$13,125/year each

Municipalities/Regionals = \$4,375/year each

ALL COSTS TO BE REEVALUATED AT END OF EVERY YEAR



GSP Schedule



 = Milestone