JOINT POWERS AUTHORITY BOARD MEETING
Oroville City Council Chambers
1735 Montgomery Street
Oroville, CA. 95965

Wyandotte Creek
GROUNDWATER SUSTAINABILITY AGENCY

August 26, 2021
REGULAR MEETING
OPEN SESSION 2:00 PM
AGENDA

REQUESTS TO ADDRESS BOARD

If you would like to address the Board at this meeting, you are requested to complete the blue speaker request form (located on the wall by the agendas) and hand it to the Board Clerk, who is seated on the right of the Council Chamber. The form assists the Clerk with minute taking and assists the Board in conducting an orderly meeting. Providing personal information on the form is voluntary. For scheduled agenda items, *please submit the form prior to the conclusion of the staff presentation for that item.* Pursuant to Government Code Section 54954.2, the Board is prohibited from taking action except for a brief response from the Board or staff to statements or questions relating to a non-agenda item.

Attend In Person or by one of the methods listed below:

- Zoom Link: https://zoom.us/j/91028842432?pwd=TVh4SlFHbUhyTG9oeXFnejFWUjEwZz09
- By Phone – 1-669-900-6833 Passcode: 17351735
- Zoom Application: Meeting ID: 91028842432 Passcode: 17351735
- Email comments accepted until 12pm to publiccomment@cityoforoville.org

CALL TO ORDER / ROLL CALL

1. Pledge of Allegiance
2. Roll Call
   Board Members: Bill Connelly, Eric Smith, William Bynum, Kyle Daley, Bruce Wristen

   Staff Management Team: Butte County – Christina Buck, Kelly Peterson, TWSD – Chris Heindell,
   Oroville – Matt Thompson

CONSENT CALENDAR

1. **The Board may approve the WC GSA Board Meeting minutes of July 22, 2021** (Matt Thompson)

REGULAR BUSINESS

2. **The GSA Board will review and consider public comments and the Wyandotte Creek GSA Stakeholder Advisory Committee's recommendations on the Draft Project Management Actions Chapter of the GSP.**

   Staff requests recommendations from the GSA Boards regarding which Projects and Management Actions to include in the public review draft of the Groundwater Sustainability Plan to be released in September, the ranking of the proposed "Planned Projects", whether the proposed "Potential Projects" should also be ranked and seeks direction on any desired changes to other components of the PMA Chapter. (Kelly Peterson)

3. **The Board will receive an overview of the Draft Implementation Chapter and give direction or possible recommendations to staff on components of the Implementation Chapter including discussion and direction on Inter-basin Coordination.** (Christina Buck)

4. **The Board may approve of a change in dates for November and December of 2021 to November 18, 2021 and December 16, 2021 each at 2:00 p.m. due to holiday conflicts** (Chris Heindell)

REPORTS AND CORRESPONDENCE

6. Financial Report (Written - Kelly Peterson)

7. Public Correspondence from Tasha Levinson

8. Management Committee Report (Verbal – Kelly Peterson)

PUBLIC COMMENT- NON-AGENDA ITEMS

This is the time for the public to address the Board on items not listed on the agenda. The WC GSA Board is prohibited by State law from taking action on any item presented if it is not listed on the agenda. Comments will be limited to three minutes per person.

ADJOURN THE MEETING

The meeting will be adjourned. A regular meeting of the Wyandotte Creek GSA Board will be scheduled for September 23, 2021 at 2:00 PM.

Accommodating Those Individuals with Special Needs – In compliance with the Americans with Disabilities Act, the City of Oroville encourages those with disabilities to participate fully in the public meeting process. If you have a special need in order to allow you to attend or participate in our public meetings, please contact the Board Clerk at (530) 538-2535, well in advance of the regular meeting you wish to attend, so that we may make every reasonable effort to accommodate you. Documents distributed for public session items, less than 72 hours prior to meeting, are available for public inspection at City Hall, 1735 Montgomery Street, Oroville, California.

Recordings - All meetings are audio recorded.

JOINT POWERS AUTHORITY BOARD MEETIN

Oroville City Council Chambers
1735 Montgomery Street
Oroville, CA. 95965

July 22, 2021
MINUTES

Wyandotte Creek
GROUNDWATER SUSTAINABILITY AGENCY

This meeting was recorded and may be viewed at Cityoforoville.org. This agenda was posted on July 16, 2021 at 3:30pm.

CALL TO ORDER / ROLL CALL

Chairperson Connelly called the meeting to order at 2:02pm.

1. Pledge of Allegiance – Led by Chairperson Connelly.
2. Roll Call

PRESENT: Board Members: Bill Connelly, Eric Smith, William Bynum, Kyle Daley, Bruce Wristen

STAFF: Butte County –Kelly Peterson and Christina Buck, TWSD – Chris Heindell, Oroville – Matt Thompson, Jackie Glover

CONSENT CALENDAR

Motion by Board Member Wristen and second by Board Member Bynum to approve the consent calendar. Motion passed unanimously.

1. The Board approved the Minutes of the June 24, 2021 Board Meeting
2. The Board appointed Kelly Peterson as the Wyandotte Creek GSA Administrator
3. The Board appointed Christina Buck as the Wyandotte Creek GSA GSP Manager

REGULAR BUSINESS

4. The Board received a presentation and provided recommendations on revisions to the Sustainable Management Criteria and Monitoring Network Draft Chapters. Public comments from Kathy Brazil, Tasha Levinson and David Kehn were provided on this item.
5. The Board received an update on the Projects and Management Actions Chapter Overview and Schedule
6. The Members considered setting future joint board meeting dates for the continued review of draft individual GSP chapters and components, and the review and approval of the public review draft and the final compiled GSP. No dates were selected at this time.

REPORTS AND CORRESPONDENCE

7. Management Committee Update – Kelly Peterson provided an update.
8. Draft meeting minutes from the most recent Wyandotte Creek Advisory Committee Meeting – The Board received a Written Report from Kelly Peterson
9. Monthly Financial Status Report – The Board received a Written Report from Kelly Peterson
10. Correspondence from Community Member Tasha Levinson - Written Correspondence was attached to the agenda packet.

PUBLIC COMMENT- NON-AGENDA ITEMS

The board received written public comment from Kathy Brazil.

ADJOURNMENT

The meeting was adjourned at 3:13pm by Chairperson Connelly.

APPROVED:

Chairperson Bill Connelly

ATTESTED:

GSA Administrator Kelly Peterson

Water and Resource Conservation

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MEMORANDUM

DATE: August 13, 2021

TO: Wyandotte Creek GSA Board

FROM: Kelly Peterson, GSA Administrator / Water Resources Scientist, Butte County

RE: Projects and Management Actions Public Review Draft Chapter

The draft Projects and Management Actions (PMAs) Chapter was made available July 28, 2021 for a public comment period. The initial comment period ended on August 11th, 2021 to be included in the meeting materials and consideration by the Groundwater Sustainability Agency (GSA) Boards at their August 11th, 2021 meeting.

The documents are available online at VinaGSA.org:
https://www.vinagsa.org/groundwater-sustainability-plan-gsp

Table 1. List of Planned Projects and rankings as documented in the draft PMA Chapter

Project Name	Project Type	Project Proponent/ potential Participating Entities	Measurable Objective Expected to Benefit	Current Status	Timetable (initiation and completion)	Estimated Costs	Required Permitting and Regulatory Process	Expected Groundwater Demand Reduction (AF/year)
Project 1: Residential Water Conservation	Conservation	Wyandotte Creek GSA, municipal water providers	Groundwater Levels, Groundwater Storage	Planning Stage	2022-2025	To be decided (TBD)	N/A	100 – 200
Project 2: Agricultural Irrigation Efficiency	Conservation	Wyandotte Creek GSA	Groundwater Levels	Planning Stage	2022-2025	TBD	N/A	4,000
Project 3: Flood MAR	Direct Recharge, In-Lieu Recharge	Wyandotte Creek GSA	Groundwater Levels	Planning Stage	2022-2032	TBD	State Water Resources Control Board (SWRCB) Water Right Permit, California Environmental Quality Act (CEQA)	TBD
Project 4: Oroville Wildlife Area Robinson's Riffle Project	In-Lieu Recharge	Sutter Butte Flood Control Agency, Golden State Salmon Association	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	TBD; Sutter Butte Flood Control Agency (SBFCA) is currently seeking funding	$1.7 million (planning, design, environmental, permitting)	CEQA/National Environmental Policy Act (NEPA), United States Army Corps of Engineers (USACE) 408, USACE 404, California Department of Fish and Wildlife (CDFW) ITP, CDFW 1600 LSAA, State Lands Commission Lease, CVRWQCB 401, CVFPB Encroachment Permit, Department of Water Resources (DWR) Encroachment Permit	TBD

Table 1. List of Potential Projects and rankings as documented in the draft PMA Chapter

Project Name	Project Type	Project Proponent/ Potential Participating Entities	Measurable Objective Expected to Benefit	Current Status	Timetable (initiation and completion)	Estimated Costs	Required Permitting and Regulatory Process	Expected Groundwater Demand Reduction (AF/year)
Project 5: Intra-Basin Water Transfer	Intra-basin water transfer	TWSD, Butte County, DWR, agricultural users	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	6-12 months	TBD	DWR, Butte County	3,000-5,000
Project 6: Streamflow Augmentation	Direct Recharge, In-Lieu Recharge	Wyandotte Creek GSA, Pacific Gas and Electric Company (PG&E), surface water rights holders	Groundwater Levels, Surface Water Depletion	Planning Stage	2022-2025	$50-100 per acre-foot	SWRCB Water Right Permit, CEQA	1,000-5,000
Project 7: Agricultural Surface Water Supplies	Intra-Basin Water Transfer	Wyandotte Creek GSA, Agricultural Groundwater Users of Butte County, Farm Bureau	Groundwater Levels	Planning Stage	2025-2032	TBD	SWRCB Water Right Permit, CEQA, others TBD	2,000-3,000
Project 8: Palermo Clean Water Improvement Project	Conservation	Butte County Department Water and Resource Conservation, South Feather Water and Power, Palermo Community Council	Groundwater Levels	Planning Stage	Project design and evaluation of funding sources underway, implementation could begin in 2021	TBD	TBD	Unknown
Project 10: Well Upgrades	Conservation	TWSD, DWR, Butte County, Wyandotte Creek GSA	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	6-12 months	TBD	TBD	TBD
Project 11: TWSD Water Treatment Plant Expansion	Conservation	TWSD, DWR, Division of Drinking Water	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	6-12 months	$1.5 million-$3 million	Division of Drinking Water, DWR	500+
Project 12: Hydrant Metering to Reduce Non-Beneficial Consumptive	Conservation	South Feather Water and Power, Butte County	Surface Water Depletion	Planning Stage	Completed by 2025	$800,000	N/A	Unknown
Project 13: Fuel Management for Watershed Health	Conservation	Wyandotte Creek GSA, Butte County Fire Safe Council, Butte County Resource Conservation District, NRCS	Groundwater Levels, Groundwater Storage, Water Quality, Surface Water Depletion	Planning Stage	2022-2042	TBD	CEQA	TBD
Project 14: Removal of Invasive Species	Conservation	Wyandotte Creek GSA; other local, state, federal organizations and agencies	Groundwater Levels	Planning Stage	2022-2025	TBD	CEQA and/or NEPA (depending on project location and impact)	TBD

Table 1. List of Conceptual Projects and rankings as documented in the draft PMA Chapter

Project Name	Project Type	Project Proponent/ Potential Participating Entities	Measurable Objective Expected to Benefit	Current Status	Timetable (initiation and completion)	Estimated Costs	Required Permitting and Regulatory Process	Expected Groundwater Demand Reduction (AF/year)
Project 9: Recharge Well (Injection Well)	Direct Recharge	TWSD, DWR, Butte County, Wyandotte Creek GSA	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	12-24 months	TBD	TBD	TBD
Project 15: Extend Orchard Replacement	Conservation	Wyandotte Creek GSA, Butte County	Groundwater Levels	Planning Stage	Dependent upon availability of financial incentives and willingness of growers to participate	TBD	N/A	TBD

Table 2. Management Actions as documented in the draft PMA Chapter.

Action # (not ranked)	Action	Lead Agency
1.	General Plan Updates	Butte County
2.	Domestic Well Mitigation	Vina GSA and RCRD GSA
3.	Well Permitting Ordinance	Butte County
4.	Landscape Ordinance	Butte County & City of Chico
5.	Expansion of Water Purveyors Service Area	Vina GSA
6.	Large Diameter Well Moratorium	Butte County
7.	Groundwater Allocation	Vina GSA & RCRD GSA

Public Comment Overview

Comments were received from two individuals. Several themes emerged which are summarized in the bullets below:

Comments expressed:

OUTREACH

- Support for strengthening language about outreach

PROJECTS

- Support for the Streamflow Augmentation project specify which streams would be included i.e. Ruddy Creek and concern about flooding and impacts to properties.
- Support for the Removal of Invasive Species project to include Ruddy Creek
- Concerns about Recharge Well (Injection Well) posing an environmental health risk by introducing treated water into the natural environment and creating an increased flood risk to home owners and a request for identification of the required permitting and regulatory processes for the project.

MANAGEMENT ACTIONS

- Concern about General Plan Update and Landscape Ordinance and GSP submission timing and whether GSP information will be included / considered during their development

OTHER

- Concern about fires, climate change, impacts to the snowpack region of the watershed, reduced surface water supplies, groundwater depletion by permitted large-diameter wells causing other wells to go dry and the approach of the Wyandotte Creek GSA to seemingly avoid state interference verses maintenance / management of sustainable groundwater levels.

All comments received to date have been compiled and attached with this memo. This information is provided for discussion and possible direction to staff. This Groundwater Sustainability Plan (GSP) chapter remains in draft form and will be combined, as revised, with the rest of the GSP for review and public comment in September.

Wyandotte Creek Stakeholder Advisory Committee (WAC) Discussion and Recommendations

Staff provided the WAC with detailed information and presented highlights from the PMA Chapter regarding draft PMAs for their July and August meetings. Details of their discussion can be found in the draft Summary Notes included in the Board packet. The following describes comments and discussions regarding formal recommendations they made and substantive issues they discussed for the Board to consider.

The WAC made one recommendation to the Vina GSA Board for ***Projects*** as listed:

1. **The SHAC made a recommendation to not rank "potential" projects in the draft PMA chapter.** All WAC Members were in Support of this recommendation.

2. The WAC suggested adding the Palermo Clean Water Improvement project (#8), the TWSD Water Treatment Plant Expansion (#11) and the Hydrant Metering to Reduce Non-Beneficial Consumption (#12) to the Planned projects list. Project #12 will be revised after collaborating with Kristen McKillop, David Kehn, and Chris Heindell to ensure it accurately characterizes the desire to focus on water loss control.

The WAC made the following recommendations to the GSA Board for ***Management Action*** as listed:

WAC Recommendations	WAC Member Support
1. Soften the language around the GSA role to indicate the GSA intends to monitor, participate, and coordinate with respective agencies.	• Yes: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson
2. Remove #4 landscape ordinance.	• Remove: NA • Keep: D. Kehn • Neutral: K. McKillop, N. Johansson, D. Sherwood, D. Williams; these WAC members suggested including additional language to indicate decisions and recommendations would be driven by data and improved understanding.
3. Remove management action #6 Large Well Moratorium from the list	• Yes: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson
4. Remove management action #7 Groundwater Allocation	• Yes: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson

The WAC also outlined overall comments and detailed concerns and considerations for individual Projects Management Actions. Please refer to the draft WAC meeting summary included in the August 26, 2021 Board meeting materials included in the Management Committee Report for detailed individual stakeholder perspectives.

Consideration by the Joint GSA Boards

An overview of the draft PMA Chapter, public comments, and WAC recommendations will be presented to the GSA Boards for information and discussion. Staff would like to receive input from the GSA Boards on what they would like to see in the complete public review draft of the Groundwater Sustainability Plan to be released in September. For reference, a summary table of the PMAs as presented in the draft chapter with revisions based on WAC discussions and staff input is included below for discussion for the Board's consideration. In this table, only planned projects are ranked, projects without potential complex legal implications associated with recharge are prioritized then priority is given for projects based on the estimated volumes of groundwater to be produced by the project.

Table 3. Summary table of the PMAs as presented in the draft chapter with revisions based on WAC discussions and staff input for the Boards consideration.

Rank	Project Name	Planned/Potential/Conceptual
1	Residential Water Conservation	Planned
2	Agricultural Irrigation Efficiency	Planned
3	Flood MAR	Planned
4	Oroville Wildlife Area Robinson's Riffle Project	Planned
5	Streamflow Augmentation	Planned
6	Palermo Clean Water Improvement Project	Planned
7	TWSD Water Treatment Plant Expansion	Planned
-	Hydrant Metering to Reduce Non-Beneficial Consumptive (w/revisions)	Potential
-	Intra-Basin Water Transfer	Potential
-	Agricultural Surface Water Supplies	Potential
-	Palermo Clean Water Improvement Project	Potential
-	Well Upgrades	Potential
-	TWSD Water Treatment Plant Expansion	Potential
-	Hydrant Metering to Reduce Non-Beneficial Consumptive	Potential
-	Fuel Management for Watershed Health	Potential
-	Removal of Invasive Species	Potential
-	Recharge Well (Injection Well)	Potential
-	Extend Orchard Replacement	Potential

Rank	Project Name	Planned/Potential/Conceptual
-	County Contour Mapping	Data Collection Based Project
-	Update the Butte Basin Groundwater Model	Data Collection Based Project
MANAGEMENT ACTIONS*		
	Name	**Notes**
	General Plan Updates	
	Domestic Well Mitigation	
	Well Permitting Ordinance	
	Landscape Ordinance	
	Expansion of Water Purveyors Service Area	
	Groundwater Allocation (with revisions)	Change language based on legal advice

*Where applicable revise language around GSAs intention to monitor, participate, and coordinate with respective agencies.

Requested Action:

Staff requests recommendations from the GSA Board regarding:

a. Which Projects and Management Actions to include in the public review draft of the Groundwater Sustainability Plan to be released in September.

b. The ranking of the proposed “Planned Projects”.

c. Whether the proposed “Potential Projects” should also be ranked.

d. Direction on any desired changes to other components of the PMA Chapter.

Public comments from KB August 2 2021 re draft of the Projects and Management Actions Chapter of the Wyandotte Creek Subbasin Groundwater Sustainability Plan

Page 11 6.2.4.5 Project 6: Streamflow Augmentation Expected Benefits and Evaluation: Diverting flood waters will increase surface water flows and groundwater levels in the basin. How Project Will Be Accomplished/Evaluation of Water Source: Wyandotte Creek GSA will evaluate which surface water sources will be available in a particular year to divert to creeks, streams, and recharge ponds. Legal Authority: The project is being conducted by the Wyandotte Creek GSA. Estimated Costs and Plans to Meet Costs: $50-100 per acre-foot; funding via Proposition 1 (funds provided by the Stream Flow Enhancement Program through the California Wildlife Conservation Board), Proposition 68, Wyandotte Creek GSA fees, Resource Renewal Institute. Circumstances for Implementation: This project is a Planned Project that is anticipated to move forward. This needs to specify which streams, as Ruddy Creek is already in a FEMA floodplain, so adding water could create more flooding to exsisting properties.

Page 18: **6.2.5.6 Project 14: Removal of Invasive Species** The removal of invasive species would benefit the natural ecosystem and prevent them from negatively affecting the amount of available water and the ability for water to recharge.Will this include Ruddy Creek? as it has many invasive Eucalyptus tree growing along its streambanks.

Page 19 6.2.6.1 Project 9: Recharge Well (Injection Well) Under this project, the TWSD treatment plant would install an injection well that would inject raw and backwash water from its operations into the basin. This seems like it could pose an environmental health risk, by introducing treated water into the natural environment of creeks and the watershed. It also seems questionable as far as creating an increased flood risk to home owners. Required Permitting and Regulatory Process: TBD How Project Will Be Accomplished/Evaluation of Water Source: This project is a direct recharge project. The water would be supplied from the raw and backwash water from operations at the TWSD treatment plant. Having this draft state TBD is not acceptable for a proposal that would release raw & backwash treated water into the environment. You better know the required permitting and regulatory

Page 21 6.2.7 Notification Process The GSA will continue to conduct public outreach and will be responsible for notification of the projects. Regular updates will be provided to the GSA Boards and presented on the website as projects are implemented. Outreach is likely to include public notices, meetings, website, social media, and email lists. I request this report assure clearer outreach rather than state “is likely” how about stating ‘outreach will”

Page 21 6.3.1 General Plan Updates Under this management action, the Wyandotte Creek GSA would coordinate with the City of Oroville and Butte County, who are currently updating their General Plans, to make necessary amendments so that the plans recognize important components of the Subbasin’s GSP. Isn’t timing an issue here? Will the WCGSA info be included or amended if submission deadlines for the General Plan are not met?

Page 22 6.3.4 Landscape Ordinance At the request of the Wyandotte Creek GSA, and under the authority of Butte County and the City of Oroville, a landscape ordinance would be implemented that would require new residential, commercial, and industrial developments to use drought-resistant species and to limit the size of grass turf lawns. This ordinance would also promote xeriscaping and focus efforts and funds on reducing landscape irrigation and water use for swimming pools. The implementation of this ordinance would require a period of planning, public discussion, and code enforcement for each new building permit. .Again, isn’t timing an issue here? Will the WCGSA info be considered to current proposed developments and projects that come up or will this requirement be added as a condition to planning approval.

6 Project and Management Actions

This chapter includes relevant information about projects and management actions to satisfy California Code of Regulations (CCR) Title 23 § 354.42 and 354.44. The projects and management actions described in this chapter will help achieve the Wyandotte Creek Subbasin (Subbasin)'s sustainability goal.

6.1 Projects, Management Actions, and Adaptive Management Strategies

Achieving sustainability in the Subbasin requires implementation of projects and management actions. The sustainability goal of the Wyandotte Creek Subbasin is to maintain a sufficient groundwater supply and quality that can be used by rural areas, communities, and agricultural users. Therefore, the overall approach will focus on investigating additional water sources to supplement groundwater and implementing various conservation programs. The projects described below were selected with this approach in mind.

6.2 Projects

6.2.1 Project Identification

Projects were identified through an outreach effort involving the Wyandotte Creek Subbasin Advisory Committee (WAC) and the Wyandotte Creek Groundwater Sustainability Agency (GSA). The process included soliciting input from governmental agencies, water purveyors, and local landowners. The GSA website allowed project proponents to input the available information on each project.

The majority of projects submitted were proposed by the Wyandotte Creek GSA. Some of the projects also include other proponents, such as the Thermalito Water and Sewer District (TWSD) and South Feather Water and Power (SFWP). The list of proponents and other potential entities involved in the projects is included in Tables 6-1, 6-2, and 6-3 below.

The provided project information was compiled into an initial draft list with similar and overlapping projects combined as appropriate. The ranked draft list was presented to the WAC and to the GSA Boards. The projects were ranked based on the following priorities:

- Project addresses one or more of the Undesirable Results
- Project is implementable with respect to technical complexity, regulatory complexity, institutional consideration, and public acceptance
- Project is implementable within the SGMA timeframe
- Project benefits Underrepresented Communities (URCs)
- Project is in an area where water quality is suitable for use

6.2.2 Project Implementation

Projects will be implemented through the individual project proponent with the Wyandotte Creek GSA providing oversight. The GSA oversight may vary from acknowledging the implementation of the project to actively participating in the design and construction of the project. The GSA will track the estimated effect on the water budget from projects annually.

6.2.3 List of Projects

Several projects to achieve the Wyandotte Creek Subbasin's sustainability goal were identified. The initial set of projects was reviewed by the WAC. A final list of 15 possible projects is included in this GSP

and they are categorized into four project types: direct recharge, in-lieu recharge, intra-basin water transfers, and demand conservation. Projects are further classified into three categories based on project status: Planned, Potential, and Longer-term or Conceptual, as defined below.

- **Planned Projects –** Projects in this category will move forward to help achieve the subbasin's sustainability before 2042.
- **Potential Projects –** Projects in this category are currently in the planning stages and may move forward if funding becomes available. Potential Projects represent a "menu of options" for the Subbasin to achieve long-term sustainability and offset the remaining imbalance above and beyond implementation of the Planned Projects.
- **Longer-term or Conceptual Projects –** Projects in this category are in the early conceptual planning stages and will require significant additional work to move forward. Longer-term/Conceptual Projects represent potential future projects that could conceptually provide a benefit to the Subbasin in the future, but that would need to be further developed.

This subsection of the GSP satisfies the requirements of CCR title 23 § 354.44. Consistent with SGMA requirements, the project descriptions contain information regarding:

- The Measurable Objective benefitted by the project
- Permitting and regulatory processes
- Timetable for initiation and completion
- Expected benefits
- How the project will be accomplished
- Legal authority
- Estimated costs and plans to meet costs
- Implementation circumstances
- Public noticing

Tables 6-1, 6-2, and 6-3 provide a summary of the 15 projects. Full descriptions are included below. Figures 6-1 and 6-2 show the locations of these planned and potential projects.

Table 6-1: List of Planned Projects

Project Name	Project Type	Project Proponent/ potential Participating Entities	Measurable Objective Expected to Benefit	Current Status	Timetable (initiation and completion)	Estimated Costs	Required Permitting and Regulatory Process	Expected Groundwater Demand Reduction (AF/year)
Project 1: Residential Water Conservation	Conservation	Wyandotte Creek GSA, municipal water providers	Groundwater Levels, Groundwater Storage	Planning Stage	2022-2025	To be decided (TBD)	N/A	100 – 200
Project 2: Agricultural Irrigation Efficiency	Conservation	Wyandotte Creek GSA	Groundwater Levels	Planning Stage	2022-2025	TBD	N/A	4,000
Project 3: Flood MAR	Direct Recharge, In-Lieu Recharge	Wyandotte Creek GSA	Groundwater Levels	Planning Stage	2022-2032	TBD	State Water Resources Control Board (SWRCB) Water Right Permit, California Environmental Quality Act (CEQA)	TBD
Project 4: Oroville Wildlife Area Robinson's Riffle Project	In-Lieu Recharge	Sutter Butte Flood Control Agency, Golden State Salmon Association	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	TBD; Sutter Butte Flood Control Agency (SBFCA) is currently seeking funding	$1.7 million (planning, design, environmental, permitting)	CEQA/National Environmental Policy Act (NEPA), United States Army Corps of Engineers (USACE) 408, USACE 404, California Department of Fish and Wildlife (CDFW) ITP, CDFW 1600 LSAA, State Lands Commission Lease, CVRWQCB 401, CVFPB Encroachment Permit, Department of Water Resources (DWR) Encroachment Permit	TBD

Note: AF/year = acre-feet per year

Table 6-2: List of Potential Projects

Project Name	Project Type	Project Proponent/ Potential Participating Entities	Measurable Objective Expected to Benefit	Current Status	Timetable (initiation and completion)	Estimated Costs	Required Permitting and Regulatory Process	Expected Groundwater Demand Reduction (AF/year)
Project 5: Intra-Basin Water Transfer	Intra-basin water transfer	TWSD, Butte County, DWR, agricultural users	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	6-12 months	TBD	DWR, Butte County	3,000-5,000
Project 6: Streamflow Augmentation	Direct Recharge, In-Lieu Recharge	Wyandotte Creek GSA, Pacific Gas and Electric Company (PG&E), surface water rights holders	Groundwater Levels, Surface Water Depletion	Planning Stage	2022-2025	$50-100 per acre-foot	SWRCB Water Right Permit, CEQA	1,000-5,000
Project 7: Agricultural Surface Water Supplies	Intra-Basin Water Transfer	Wyandotte Creek GSA, Agricultural Groundwater Users of Butte County, Farm Bureau	Groundwater Levels	Planning Stage	2025-2032	TBD	SWRCB Water Right Permit, CEQA, others TBD	2,000-3,000
Project 8: Palermo Clean Water Improvement Project	Conservation	Butte County Department Water and Resource Conservation, South Feather Water and Power, Palermo Community Council	Groundwater Levels	Planning Stage	Project design and evaluation of funding sources underway, implementation could begin in 2021	TBD	TBD	Unknown
Project 10: Well Upgrades	Conservation	TWSD, DWR, Butte County, Wyandotte Creek GSA	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	6-12 months	TBD	TBD	TBD
Project 11: TWSD Water Treatment Plant Expansion	Conservation	TWSD, DWR, Division of Drinking Water	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	6-12 months	$1.5 million-$3 million	Division of Drinking Water, DWR	500+
Project 12: Hydrant Metering to Reduce Non-Beneficial Consumptive	Conservation	South Feather Water and Power, Butte County	Surface Water Depletion	Planning Stage	Completed by 2025	$800,000	N/A	Unknown

Project Name	Project Type	Project Proponent/ Potential Participating Entities	Measurable Objective Expected to Benefit	Current Status	Timetable (initiation and completion)	Estimated Costs	Required Permitting and Regulatory Process	Expected Groundwater Demand Reduction (AF/year)
Project 13: Fuel Management for Watershed Health	Conservation	Wyandotte Creek GSA, Butte County Fire Safe Council, Butte County Resource Conservation District, NRCS	Groundwater Levels, Groundwater Storage, Water Quality, Surface Water Depletion	Planning Stage	2022-2042	TBD	CEQA	TBD
Project 14: Removal of Invasive Species	Conservation	Wyandotte Creek GSA; other local, state, federal organizations and agencies	Groundwater Levels	Planning Stage	2022-2025	TBD	CEQA and/or NEPA (depending on project location and impact)	TBD

Table 6-3: List of Conceptual Projects

Project Name	Project Type	Project Proponent/ Potential Participating Entities	Measurable Objective Expected to Benefit	Current Status	Timetable (initiation and completion)	Estimated Costs	Required Permitting and Regulatory Process	Expected Groundwater Demand Reduction (AF/year)
Project 9: Recharge Well (Injection Well)	Direct Recharge	TWSD, DWR, Butte County, Wyandotte Creek GSA	Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence	Planning Stage	12-24 months	TBD	TBD	TBD
Project 15: Extend Orchard Replacement	Conservation	Wyandotte Creek GSA, Butte County	Groundwater Levels	Planning Stage	Dependent upon availability of financial incentives and willingness of growers to participate	TBD	N/A	TBD

6.2.4 Planned Projects

Projects categorized as Planned Projects are expected to move forward and be completed to achieve the Subbasin's sustainability goal by 2042. The estimated groundwater supply from these projects is expected to offset any potential overdraft.

6.2.4.1 Project 1: Residential Water Conservation

Municipal water providers, who currently supply water to the City of Oroville and others throughout Butte County, are planning to implement water conservation practices in accordance with their 2020 Urban Water Management Plans. Some of these conservation projects include the installation of low flow fixtures, toilet replacements, urinal valve and bowl replacements, clothes washer replacements, residential conservation kits, smart controllers, and high efficiency irrigation nozzles. Other projects include water waste prevention ordinances, metering, conservation pricing, public education and outreach, programs to assess and manage distribution system real loss, water conservation program coordination and staffing support, and other demand management measures.

Project Summary	
Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA /Municipal water providers (including California Water Service Oroville, TWSD)
Project Type:	Conservation
Estimated Groundwater Offset and/or Recharge:	100 – 200 acre-feet per year

Measurable Objective Expected to Benefit: Groundwater Levels, Groundwater Storage

Project Status: This project is currently in the planning stages.

Required Permitting and Regulatory Process: N/A

Timetable for Initiation and Completion: 2022-2025

Expected Benefits and Evaluation: As groundwater is the primary source of water for the region, these various conservation projects will reduce groundwater demand, allowing groundwater levels and overall storage to recover.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a demand-side conservation project conducted by municipal water service providers. No additional water source will be utilized for this project.

Legal Authority: The project would be conducted by municipal water service providers in the City of Oroville and other municipalities in the subbasin.

Estimated Costs and Plans to Meet Costs: TBD; funding via grants and local entities.

Circumstances for Implementation: This project is a Planned Project that is anticipated to move forward.

Trigger for Implementation and Termination: Increased water demand from planned developments in the City of Oroville and Butte County General Plans.

Process for Determining Conditions Requiring the Project have Occurred: Not applicable; this is a Planned Project that is anticipated to move forward.

6.2.4.2 Project 2: Agricultural Irrigation Efficiency

The Wyandotte Creek GSA, the Agricultural Groundwater Users of Butte County, and the Butte County Farm Bureau are conducting a survey of agricultural groundwater users in the Wyandotte Creek Subbasin, which is expected to be completed by July 2021. The goal of the survey is to identify current irrigation practices and determine where improvements can be made and how overall participation can increase. Several of the recommendations that will come out of this survey could apply to the Wyandotte Creek Subbasin. The adoption of more efficient irrigation practices has the potential to reduce groundwater demand by up to 4,000 acre-feet per year.

Project Summary	
Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA, Agricultural Groundwater Users of Butte County, Butte County Farm Bureau
Project Type:	Conservation
Estimated Groundwater Offset and/or Recharge:	4,000 acre-feet/year

Measurable Objective Expected to Benefit: Groundwater Levels

Project Status: This project is currently in the planning stages.

Required Permitting and Regulatory Process: N/A

Timetable for Initiation and Completion: 2022-2025

Expected Benefits and Evaluation: The increased participation in the use of more efficient irrigation practices will reduce the overall demand on groundwater for agricultural use, allowing the Subbasin's groundwater levels to be restored.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a demand-side conservation project. No additional water source will be utilized for this project.

Legal Authority: The project is being conducted by the Vina GSA. The recommendations from the survey, if adopted, would be implemented by the Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: TBD; likely funding via Proposition 1, Proposition 68, United States Department of Agriculture (USDA), Drought Resiliency Grants.

Circumstances for Implementation: This project is a Planned Project that is anticipated to move forward. As scenarios change, the Potential Projects can come online to bring additional resources for adaptive management. Implementation of Potential Projects will be based on long-term management or changing needs of the GSA or Subbasin.

Trigger for Implementation and Termination: The recommendations provided in the survey for the Vina Subbasin could be applicable and help conserve groundwater in the neighboring Wyandotte Creek Subbasin. The project will be initiated once the results of the initial survey are available, estimated around July 2021.

Process for Determining Conditions Requiring the Project have Occurred: This is a Planned Project that is anticipated to move forward.

6.2.4.3 Project 3: Flood MAR

DWR originally developed the Flood MAR initiative to promote groundwater recharge programs. Under this project, the Wyandotte Creek GSA would adopt a similar approach to identify opportunities for recharge specific to the Subbasin. Some projects already identified include the Wyandotte Creek, Wyman Ravine, Wilson Creek, North Honcut Creek, Feather River, and Ruddy Creek and will utilize water from the seasonal high flows from these creeks and streams for fields, recharge ponds, and recharge basins.

Project Summary	
Project Proponent:	Wyandotte Creek GSA
Project Type:	Direct Recharge, In-Lieu Recharge
Estimated Groundwater Offset and/or Recharge:	TBD

Measurable Objective Expected to Benefit: Groundwater Levels

Project Status: This project is currently in the planning stages.

Required Permitting and Regulatory Process: California SWRCB Water Right Permit, CEQA.

Timetable for Initiation and Completion: 2022-2032

Expected Benefits and Evaluation: By identifying specific locations and resources for recharge projects through the Flood MAR initiative, the Wyandotte Creek GSA can focus its efforts and direct water from those locations to recharge areas and increase groundwater levels in the region.

How Project Will Be Accomplished/Evaluation of Water Source: The Wyandotte Creek GSA will identify specific water sources for the recharge projects. Some sources already identified include Wyandotte Creek, Wyman Ravine, Wilson Creek, North Honcut Creek, Feather River, and Ruddy Creek.

Legal Authority: The project is being conducted by the Wyandotte Creek GSA. Additional evaluation of water rights may be necessary as projects move forward.

Estimated Costs and Plans to Meet Costs: TBD; funding via Proposition 1 and Proposition 68.

Circumstances for Implementation: This project is a Planned Project that is anticipated to move forward.

Trigger for Implementation and Termination: Availability of water sources.

Process for Determining Conditions Requiring the Project have Occurred: This is a Planned Project that is anticipated to move forward.

6.2.4.4 Project 4: Oroville Wildlife Area Robinson's Riffle Project

The Robinson's Riffle Project is a major restoration project for the Oroville Wildlife Area, a 12,000-acre area located in Butte County and managed by DWR and the CDFW. Under this project, the Feather River would undergo major grading improvements that would lower the floodplain surface to a more naturalized condition by excavating tailing piles, reconnect the overbank areas to the main channel, and create new side-channel and floodplain habitat. This work would increase the overall area of riverine

habitat, thereby improving the flow and quality of the water, removing invasive species along the banks, and increasing the surface available for recharge into the aquifer during flood events. Additionally, increasing the overall streamflow in the river will benefit several local species. Necessary permits will be obtained by the SBFCA, in partnership with DWR and CDFW. SBFCA is in the process of conducting a series of workshops, during which they will share details of the project with potential stakeholders and resource agencies and obtain the necessary funding to move forward.

Project Summary	
Submitting GSA: Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA /SBFCA, Golden State Salmon Association
Project Type:	In-Lieu Recharge
Estimated Groundwater Offset and/or Recharge:	TBD

Measurable Objective Expected to Benefit: Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence

Project Status: This project is currently seeking stakeholders who will fund the work. Workshops are being held by SBFCA to present project details.

Required Permitting and Regulatory Process: CEQA/NEPA, USACE 408, USACE 404, CDFW Incidental Take Permit, CDFW 1600 Lake and Streambed Alteration, State Lands Commission Lease, Central Valley Regional Water Quality Control Board 401, Central Valley Flood Protection Board Encroachment Permit, DWR Encroachment Permit.

Timetable for Initiation and Completion: Once funding is obtained for the project, planning, design, and permitting will take approximately 18 months.

Expected Benefits and Evaluation: Expanding the overall area of riverine habitat near the Feather River will increase the surface available for water during flood events to recharge groundwater in the Subbasin.

How Project Will Be Accomplished/Evaluation of Water Source: This project will improve streamflow in the Feather River, thereby increasing the area available for water during flood events to recharge groundwater levels and storage in the aquifer.

Legal Authority: The project is being conducted by the SBFCA.

Estimated Costs and Plans to Meet Costs: $1.7 million; funding via Proposition 1, Proposition 68, grants, DWR programs.

Circumstances for Implementation: This project is a Planned Project that is anticipated to move forward.

Trigger for Implementation and Termination: Project implementation is dependent on funding and permitting issues.

Process for Determining Conditions Requiring the Project have Occurred: This is a Planned Project that is anticipated to move forward.

6.2.4.5 Project 6: Streamflow Augmentation

Under this project, flood waters from water right holders in the region would be diverted to certain creeks or streams in the Wyandotte Creek Subbasin. This flood waters would be used for direct and in-lieu recharge to restore groundwater levels in the basin, as well as increase stream flows. The Wyandotte Creek GSA would head the project and initially conduct an investigation and feasibility study.

Project Summary	
Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA /PG&E, surface water right holders
Project Type:	Direct Recharge, In-Lieu Recharge
Estimated Groundwater Offset and/or Recharge:	1,000-5,000 acre-feet/year

Measurable Objective Expected to Benefit: Groundwater Levels, Surface Water Depletion

Project Status: This project is currently in the planning stage.

Required Permitting and Regulatory Process: SWRCB Water Right Permit, CEQA.

Timetable for Initiation and Completion: 2022-2025

Expected Benefits and Evaluation: Diverting flood waters will increase surface water flows and groundwater levels in the basin.

How Project Will Be Accomplished/Evaluation of Water Source: Wyandotte Creek GSA will evaluate which surface water sources will be available in a particular year to divert to creeks, streams, and recharge ponds.

Legal Authority: The project is being conducted by the Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: $50-100 per acre-foot; funding via Proposition 1 (funds provided by the Stream Flow Enhancement Program through the California Wildlife Conservation Board), Proposition 68, Wyandotte Creek GSA fees, Resource Renewal Institute.

Circumstances for Implementation: This project is a Planned Project that is anticipated to move forward.

Trigger for Implementation and Termination: None

Process for Determining Conditions Requiring the Project have Occurred: This is a Planned Project that is anticipated to move forward.

6.2.4.6 Project 11: TWSD Water Treatment Plant Capacity Upgrade

The TWSD is planning to increase the capacity of the water treatment plant serving the city of Oroville and surrounding area. By treating a greater volume of water for the area, the amount of groundwater pumped for drinking water can decrease.

Project Summary	
Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA / TWSD, Division of Drinking Water, DWR
Project Type:	Conservation
Estimated Groundwater Offset and/or Recharge:	500+ acre-feet/year

Measurable Objective Expected to Benefit: Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence

Project Status: This project is currently in the planning stage.

Required Permitting and Regulatory Process: Division of Drinking Water, DWR.

Timetable for Initiation and Completion: 6-12 months

Expected Benefits and Evaluation: Since groundwater is a significant contributor to drinking water in the city of Oroville and the Subbasin, increasing the capacity of the treatment plant will reduce the impact of groundwater pumping.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a demand-side conservation project by TWSD. No additional water source will be utilized for this project.

Legal Authority: The project is being conducted by the TWSD and Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: $1.5-$3 million; funding sources TBD.

Circumstances for Implementation: This project is a Planned Project that is anticipated to move forward.

Trigger for Implementation and Termination: Increased groundwater pumping for drinking water.

Process for Determining Conditions Requiring the Project have Occurred: This is a Planned Project that is anticipated to move forward.

6.2.4.7 Project 12: Hydrant Metering to Reduce Non-Beneficial Consumptive

SFWP, which provides service to cities such as Oroville and Palermo, has recognized that fire hydrants, which are primarily used for fire suppression, are being used for other unmonitored purposes. The extended use of fire hydrants is negatively affecting the amount of available surface water in the service area. The hydrants do not have meters on them, making it difficult to monitor usage when used by those without portable meters. Under this project, meters would be installed on the fire hydrants to track usage and water loss more accurately from the system. This would also help the agency comply with numerous state regulatory requirements.

Project Summary	
Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA /South Feather Water and Power, Butte County
Project Type:	Conservation
Estimated Groundwater Offset and/or Recharge:	Unknown

Measurable Objective Expected to Benefit: Surface Water Depletion

Project Status: This project is currently in the planning stage.

Required Permitting and Regulatory Process: N/A

Timetable for Initiation and Completion: To be completed by 2025.

Expected Benefits and Evaluation: An improved monitoring system for water usage from fire hydrants will give a better indication as to the effect on surface water in the Subbasin. This can prove useful for the Wyandotte Creek GSA when it comes to further water management decisions and strategies.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a demand-side conservation project by SFWP. No additional water source will be utilized for this project.

Legal Authority: The project is being conducted by SFWP and Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: $800,000; funding via state and federal water use efficiency grants.

Circumstances for Implementation: This project is a Planned Project that is anticipated to move forward. As scenarios change, the Potential Projects can come online to bring additional resources for adaptive management. Implementation of Potential Projects will be based on long-term management or changing needs of the GSA or Subbasin.

Trigger for Implementation and Termination: Currently, fire hydrants do not have individual meters, making it difficult to track water usage when they are not used for fire suppression or by individuals with rented portable meters.

Process for Determining Conditions Requiring the Project have Occurred: Not applicable; this is a Planned Project that is anticipated to move forward.

6.2.5 Potential Projects

Projects categorized as Potential Projects are currently in the planning stages and may move forward if funding becomes available. Potential Projects represent a “menu of options” for the Subbasin to achieve long-term sustainability and offset the remaining imbalance above and beyond implementation of the Planned Projects.

6.2.5.1 Project 5: Inter-Basin Water Transfer

Under this project, surface water would be transferred from a neighboring basin to the Wyandotte Creek Subbasin.

Project Summary	
Submitting GSA: Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA / TWSD, Butte County, DWR, agricultural users
Project Type:	Direct Recharge
Estimated Groundwater Offset and/or Recharge:	3,000 – 5,000 acre-feet/year

Measurable Objective Expected to Benefit: Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence

Project Status: This project is a potential project and the feasibility is still being evaluated.

Required Permitting and Regulatory Process: DWR, Butte County

Timetable for Initiation and Completion: 2025-2030

Expected Benefits and Evaluation: Inter-basin water transfers increase the water supply in the basin, offsetting groundwater pumping by agricultural users and allowing groundwater levels and volume to recover.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a direct recharge project. The water would be supplied by surface water from neighboring subbasins.

Legal Authority: The project would be under the authority of TWSD.

Estimated Costs and Plans to Meet Costs: TBD

Circumstances for Implementation: This project is a Potential Project, meaning it is currently in the planning stages. Potential Projects represent a "menu of options" for the Subbasin to achieve long-term sustainability and offset the remaining imbalance above and beyond implementation of the Planned Projects. As scenarios change, the Potential Projects can come online to bring additional resources for adaptive management.

Trigger for Implementation and Termination: Availability of water sources and negotiations with water suppliers.

Process for Determining Conditions Requiring the Project have Occurred: Implementation of Potential Projects will be based on long-term management or changing needs of the GSA or Subbasin.

6.2.5.2 Project 7: Agricultural Surface Water Supplies

In the 2018 "Evaluation of Restoration and Recharge Within Butte County Basins," Butte County identified surface water sources that could be diverted to fields, recharge basins, and/or recharge ponds in both the Vina and Wyandotte Creek Subbasins. For Wyandotte Creek, the main source of surface water would come from Lake Oroville, while other sources are owned by water right holders in the Subbasin and upper watershed. Under this project, surface water would be used in place of groundwater in agricultural settings to allow groundwater levels in the Subbasin to recover. Agricultural users may need a dual irrigation system that allows them to use surface water and switch to groundwater when surface water is not available.

Project Summary	
Submitting GSA: Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA /Agricultural Groundwater Users of Butte County, Farm Bureau
Project Type:	Intra-Basin Water Transfer
Estimated Groundwater Offset and/or Recharge:	2,000 – 3,000 acre-feet/year

Measurable Objective Expected to Benefit: Groundwater Levels

Project Status: This project is a potential project and the feasibility is still being evaluated.

Required Permitting and Regulatory Process: SWRCB Water Right Permit, CEQA, other TBD.

Timetable for Initiation and Completion: 2025-2032

Expected Benefits and Evaluation: By using available surface water in place of groundwater for agricultural purposes, groundwater levels in the region will be allowed to recover.

How Project Will Be Accomplished/Evaluation of Water Source: This project will transfer and utilize available surface water in the region owned by water rights holders. Most of the surface water will come from Lake Oroville.

Legal Authority: The project would be under the authority of Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: TBD; likely funding via Proposition 1 and Proposition 68.

Circumstances for Implementation: This project is a Potential Project, meaning it is currently in the planning stages. Potential Projects represent a "menu of options" for the Subbasin to achieve long-term sustainability and offset the remaining imbalance above and beyond implementation of the Planned Projects. As scenarios change, the Potential Projects can come online to bring additional resources for adaptive management.

Trigger for Implementation and Termination: Based on discussions with landowners.

Process for Determining Conditions Requiring the Project have Occurred: Implementation of Potential Projects will be based on long-term management or changing needs of the GSA or Subbasin.

6.2.5.3 Project 8: Palermo Clean Water Improvement Project

The water quality in the semi-rural city of Palermo is currently a public health issue for its nearly 2,000 residents. Most of the population obtain their potable water from individual water wells and use septic systems for wastewater treatment and disposal. The city's predominant soil type prevents surface water from properly percolating and draining, causing frequent flooding and the surfacing of untreated wastewater effluent. This, in turn, leads to septic system failures, plumbing back-ups into homes, and possible cross-contamination of pathogens in untreated wastewater with drinking water sources in the aquifer. Under this project, the SFWP would expand its service areas and water delivery capabilities to provide treated drinking water to Palermo residents.

Project Summary	
Submitting GSA:	Wyandotte Creek GSA
Project Type:	Conservation
Estimated Groundwater Offset and/or Recharge:	Unknown
Other Participating Entities:	Butte County Department Water and Resource Conservation, SFWP, Palermo Community Council

Measurable Objective Expected to Benefit: Groundwater Levels

Project Status: This project is a potential project and the feasibility is still being evaluated.

Required Permitting and Regulatory Process: LAFCO and Butte County.

Timetable for Initiation and Completion: Project design and evaluation of funding sources underway, implementation could begin in 2021.

Expected Benefits and Evaluation: Expanding the service areas in Palermo would provide more residents with clean and safe drinking water and reduce dependence on groundwater pumping wells that may be contaminated. This would also allow groundwater levels in the region to recover.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a demand-side conservation project conducted by the Butte County Department of Water and Resources Conservation. Water will be supplied by SFWP.

Legal Authority: The project would be under the authority of Butte County Department of Water and Resources Conservation, SFWP, and Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: Likely funding via grants.

Circumstances for Implementation: This project is a Potential Project, meaning it is currently in the planning stages. Potential Projects represent a "menu of options" for the Subbasin to achieve long-term sustainability and offset the remaining imbalance above and beyond implementation of the Planned Projects. As scenarios change, the Potential Projects can come online to bring additional resources for adaptive management.

Trigger for Implementation and Termination: Dependence on individual groundwater pumping wells for drinking water and frequent issues such as flooding, plumbing problems, and possible cross-contamination.

Process for Determining Conditions Requiring the Project have Occurred: Implementation of Potential Projects will be based on long-term management or changing needs of the GSA or Subbasin.

6.2.5.4 Project 10: Well Upgrades

Under this project, TWSD would install variable frequency drives and telemetry on its groundwater wells to better utilize groundwater and to document groundwater pumping.

Project Summary	
Submitting GSA:	Wyandotte Creek GSA
Project Type:	Conservation
Estimated Groundwater Offset and/or Recharge:	TBD
Other Participating Entities:	TWSD, Butte County, DWR

Measurable Objective Expected to Benefit: Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence

Project Status: This project is a potential project and the feasibility is still being evaluated.

Required Permitting and Regulatory Process: TBD

Timetable for Initiation and Completion: 2025-2030

Expected Benefits and Evaluation: By automating more of its groundwater wells, TWSD will be able to better monitor the amount of groundwater pumped, increasing the efficiency of pumping and allowing groundwater to stabilize in the Subbasin.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a demand-side conservation project conducted by TWSD. No additional water source will be utilized for this project.

Legal Authority: The project would be under the authority of TWSD and Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: TBD; funding via Wyandotte Creek GSA, DWR, Butte County.

Circumstances for Implementation: This project is a Potential Project, meaning it is currently in the planning stages. Potential Projects represent a "menu of options" for the Subbasin to achieve long-term sustainability and offset the remaining imbalance above and beyond implementation of the Planned Projects. As scenarios change, the Potential Projects can come online to bring additional resources for adaptive management.

Trigger for Implementation and Termination: Availability of funds.

Process for Determining Conditions Requiring the Project have Occurred: Implementation of Potential Projects will be based on long-term management or changing needs of the GSA or Subbasin.

6.2.5.5 Project 13: Fuel Management for Watershed Health

Numerous fuel management projects would be implemented to protect various water sources in the Subbasin and in the upper watershed of the Subbasin and to better maintain overall watershed health. The implementation of fuel management projects in the Subbasin will help with the protection of water bodies, maintaining quality and ensuring that those bodies can continue to be water sources for communities and agriculture.

Project Summary	
Submitting GSA:	Wyandotte Creek GSA
Project Type:	Conservation
Estimated Groundwater Offset and/or Recharge:	TBD
Other Participating Entities:	Butte County Fire Safe Council, Butte County Resource Conservation District, Natural Resources Conservation Service (NRCS)

Measurable Objective Expected to Benefit: Groundwater Levels, Groundwater Storage, Water Quality, Surface Water Depletion

Project Status: This project is a potential project and the feasibility is still being evaluated.

Required Permitting and Regulatory Process: CEQA

Timetable for Initiation and Completion: 2022-2042

Expected Benefits and Evaluation: Fuels have the potential to contaminate water sources, affecting water quality and their use for communities and agriculture. Fuel management will help to maintain water quality.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a demand-side conservation project conducted by Wyandotte Creek GSA. No additional water source will be utilized for this project.

Legal Authority: The project would be under the authority of Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: TBD; funding via CAL FIRE, Sierra Nevada Conservancy, California Fire Safe Council, other state/federal funding agencies.

Circumstances for Implementation: This project is a Potential Project, meaning it is currently in the planning stages. Potential Projects represent a "menu of options" for the Subbasin to achieve long-term sustainability and offset the remaining imbalance above and beyond implementation of the Planned Projects. As scenarios change, the Potential Projects can come online to bring additional resources for adaptive management.

Trigger for Implementation and Termination: None.

Process for Determining Conditions Requiring the Project have Occurred: Implementation of Potential Projects will be based on long-term management or changing needs of the GSA or Subbasin.

6.2.5.6 Project 14: Removal of Invasive Species

Invasive species are a threat to the Wyandotte Creek Subbasin's ecosystem and water resources since they are known to consume water and hamper recharge. Under this project, invasive species and native grasses would be mapped to help track the effects these species have on water supplies and to help plan out future groundwater management actions. Following this initial mapping, management plans would be developed to establish groundwater management goals and propose actions towards the removal of invasive species. Appropriate funding mechanisms would be identified and secured to move the project forward.

Project Summary	
Submitting GSA:	Wyandotte Creek GSA
Project Type:	Conservation
Estimated Groundwater Offset and/or Recharge:	TBD
Other Participating Entities:	Local, state, and federal organizations and agencies

Measurable Objective Expected to Benefit: Groundwater Levels

Project Status: This project is a potential project and the feasibility is still being evaluated.

Required Permitting and Regulatory Process: CEQA and/or NEPA depending on project location and impact.

Timetable for Initiation and Completion: 2022-2025

Expected Benefits and Evaluation: The removal of invasive species would benefit the natural ecosystem and prevent them from negatively affecting the amount of available water and the ability for water to recharge.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a demand-side conservation project conducted by the Wyandotte Creek GSA. No additional water source will be utilized for this project.

Legal Authority: The project would be under the authority of Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: TBD; funding via state and federal wildfire resiliency grants and other local, state, and federal organizations and agency programs.

Circumstances for Implementation: This project is a Potential Project, meaning it is currently in the planning stages. Potential Projects represent a "menu of options" for the Subbasin to achieve long-term sustainability and offset the remaining imbalance above and beyond implementation of the Planned Projects. As scenarios change, the Potential Projects can come online to bring additional resources for adaptive management.

Trigger for Implementation and Termination: Increase in the number of invasive species in the region and their negative effect on water supply.

Process for Determining Conditions Requiring the Project have Occurred: Implementation of Potential Projects will be based on long-term management or changing needs of the GSA or Subbasin.

6.2.6 Longer-term or Conceptual Projects

Projects categorized as Longer-term or Conceptual Projects are in the early conceptual stages and would require significant additional work to move forward. Longer-term/Conceptual Projects represent potential future projects that could conceptually provide a benefit to the Subbasin in the future, but that would need to be further developed.

6.2.6.1 Project 9: Recharge Well (Injection Well)

Under this project, the TWSD treatment plant would install an injection well that would inject raw and backwash water from its operations into the basin.

Project Summary	
Submitting GSA: Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA /TWSD, Butte County, DWR
Project Type:	Direct Recharge
Estimated Groundwater Offset and/or Recharge:	TBD

Measurable Objective Expected to Benefit: Groundwater Levels, Groundwater Storage, Water Quality, Land Subsidence

Project Status: This project is conceptual planning stages.

Required Permitting and Regulatory Process: TBD

Timetable for Initiation and Completion: 12-24 months

Expected Benefits and Evaluation: This project would use raw and backwash water, which would be discharged from the treatment plant anyway, for direct recharge into the aquifer, thereby increasing groundwater levels and volume in the Subbasin.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a direct recharge project. The water would be supplied from the raw and backwash water from operations at the TWSD treatment plant.

Legal Authority: The project would be under the authority of TWSD and Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: TBD; funding via DWR, Butte County, Wyandotte Creek GSA.

Circumstances for Implementation: This project is a Longer-term/Conceptual Project, meaning it is in the early conceptual planning stages and would require significant additional work to move forward. Longer-term/Conceptual Projects represent potential future projects that could conceptually provide a benefit to the Subbasin in the future. As scenarios change, Longer-term/Conceptual Projects can come online to bring additional resources for adaptive management. This project could be implemented when agreements are reached with all federal and state regulatory agencies and when funding is available.

Trigger for Implementation and Termination: None.

Process for Determining Conditions Requiring the Project have Occurred: Implementation of Longer-term/Conceptual Projects will be based on long-term management or changing needs of the GSA or Subbasin.

6.2.6.2 Project 15: Extend Orchard Replacement

During a typical year, agricultural farmers will redevelop their walnut and almond orchards within one season to maximize profits. However, this does not allow time for the soil to fallow. The Wyandotte Creek GSA proposes that farmers extend the removal and replanting of their orchards by one growing season through financial incentives. This program would reduce the amount of groundwater used for agriculture and the overall groundwater demand on the Subbasin. It would also reduce the need for soil treatments such as fumigation and expand recycling options for the previous orchard.

Project Summary	
Submitting GSA: Project Proponent / Other Potential Participating Entities:	Wyandotte Creek GSA /Butte County
Project Type:	Conservation
Estimated Groundwater Offset and/or Recharge:	TBD

Measurable Objective Expected to Benefit: Groundwater Levels

Project Status: This project is in the conceptual planning stages.

Required Permitting and Regulatory Process: N/A

Timetable for Initiation and Completion: TBD. Timing is dependent upon availability of financial incentives and willingness of growers to participate.

Expected Benefits and Evaluation: This project would incentivize farmers to extend the replacement of their orchards by one season, reducing overall groundwater demand on the Subbasin.

How Project Will Be Accomplished/Evaluation of Water Source: This project is a demand-side conservation project conducted by the Wyandotte Creek GSA. No additional water source will be utilized for this project.

Legal Authority: The project would be under the authority of Wyandotte Creek GSA.

Estimated Costs and Plans to Meet Costs: TBD; funding via Proposition 1, Proposition 68, USDA, NRCS.

Circumstances for Implementation: This project is a Longer-term/Conceptual Project, meaning it is in the early conceptual planning stages and would require significant additional work to move forward. Longer-

term/Conceptual Projects represent potential future projects that could conceptually provide a benefit to the Subbasin in the future. As scenarios change, Longer-term/Conceptual Projects can come online to bring additional resources for adaptive management. This project could be implemented when agreements are reached with all federal and state regulatory agencies and when funding is available.

Trigger for Implementation and Termination: None.

Process for Determining Conditions Requiring the Project have Occurred: Implementation of Longer-term/Conceptual Projects will be based on long-term management or changing needs of the GSA or Subbasin.

6.2.7 Notification Process

The GSA will continue to conduct public outreach and will be responsible for notification of the projects. Regular updates will be provided to the GSA Boards and presented on the website as projects are implemented. Outreach is likely to include public notices, meetings, website, social media, and email lists.

6.3 Management Actions

In order to achieve sustainable groundwater management, management actions can be implemented to focus on reduction of groundwater demand. The management actions can include increased data collection, education and outreach, regulatory policies, incentive programs, and enforcement actions.

The following sections will present management action options that the GSA may consider during GSP implementation. The schedule to implement the management actions is likely to vary depending upon Subbasin conditions and the expected benefits may also vary year to year.

6.3.1 General Plan Updates

Under this management action, the Wyandotte Creek GSA would coordinate with the City of Oroville and Butte County, who are currently updating their General Plans, to make necessary amendments so that the plans recognize important components of the Subbasin's GSP.

6.3.2 Domestic Well Mitigation

In order to protect domestic water supplies in the region, the Wyandotte Creek GSA would conduct the following under this management action:

1. Establish a voluntary registry for domestic wells.
2. Compile domestic well logs, screen depths, and locations.
3. Improve and deepen domestic wells so that well screens are at or below the Minimum Thresholds established for the Subbasin.
4. Provide emergency supplies, such as bottled drinking water or potable water for sanitation, to communities with dry domestic wells. Priority would be given to disadvantaged communities who are dependent on groundwater.

Creating a registry of domestic wells in the region, with information on well location and screen depths, would help the GSA compile important data into a centralized location. This would allow the GSA to determine which wells need to be updated to the current standards and which may need to be deepened, as well as to help them prioritize certain communities for emergency response.

6.3.3 Well Permitting Ordinance

According to current Butte County Code, wells are required to be screened below groundwater levels measured during the 1989 to 1994 drought. With water levels continuing to decline in the Subbasin, several domestic wells are becoming dry. At the request of the Wyandotte Creek GSA, Butte County would, under this management action, update the current well permitting ordinance to require all domestic wells in the Representative Monitoring Network area to be screened below the Minimum Threshold depths established for the Subbasin.

6.3.4 Landscape Ordinance

At the request of the Wyandotte Creek GSA, and under the authority of Butte County and the City of Oroville, a landscape ordinance would be implemented that would require new residential, commercial, and industrial developments to use drought-resistant species and to limit the size of grass turf lawns. This ordinance would also promote xeriscaping and focus efforts and funds on reducing landscape irrigation and water use for swimming pools. The implementation of this ordinance would require a period of planning, public discussion, and code enforcement for each new building permit.

6.3.5 Expansion of Water Purveyors' Service Area

Under this management action, water purveyors would expand their service areas and provide drinking water to residential areas that are currently using private domestic groundwater wells. Groundwater levels in the Subbasin would be allowed to recover with the overall decrease in groundwater demand. This action would require approval from the Butte Local Agency Formation Commission and the California Public Utilities Commission.

6.3.6 Large Diameter Well Moratorium

Under this management action, the Wyandotte Creek GSA would request that Butte County enact a moratorium that would pause approval of future permits for the development of large diameter production wells. Large diameter production wells pump groundwater from the Subbasin for a variety of uses. This temporary halt would allow groundwater levels to be restored in the Subbasin while data gaps are identified and rectified. Under this management action, neighboring subbasins would also be encouraged to adapt a similar moratorium.

6.3.7 Groundwater Allocation

The implementation of a groundwater allocation program for the Wyandotte Creek Subbasin would only apply if other projects and management actions do not achieve the interim target by 2032 and the Wyandotte Creek GSA determines that further actions will not achieve the groundwater sustainable criteria by 2042. This program would allocate groundwater demand in the Subbasin, except minimis users. Once it is determined that this program is needed to achieve the measurable objectives, it would be implemented by 2037 and initiated no earlier than 2032.

6.4 Data Collection

6.4.1 County Contour Mapping

As part of the efforts to collect the information necessary to fill the data gaps identified in Section 3, this project proposes to expand the existing monitoring program to include Butte, Glen, Colusa, and Tehama counties and conduct these groundwater elevation surveys in the spring, summer, and fall. The monitoring program would gather data used to produce groundwater contours and estimates of lateral and vertical flow direction and volume. Producing this data for the four counties will help to identify

interbasin flow patterns and influences on surface water flows and replenishment locations, thereby improving coordination between counties and water management decision-making.

Routine water table monitoring programs will track overall water table trends in the region and provide important, up-to-date data for making decisions on water management. Establishing these programs amongst the four counties will aid in the exchange of data and improve regional coordination on various water projects. The expanded water monitoring programs will be established by Vina and RCRD GSAs, with assistance from the four counties.

6.4.2 Project: Update the Butte Basin Groundwater Model

The existing Butte Basin Groundwater Model covers the Vina, Butte, and Wyandotte Creek Subbasins. The second project to help fill the identified data gaps will consist of (1) updating the Butte Basin Groundwater Model with newly acquired data; and (2) using the updated version of the model to run simulations and better establish the basin's measurable objectives.

Some of the new data to be added is the airborne electromagnetic (AEM) data and data on the different hydraulic conductivities of each layer of the aquifer. The AEM data will be used, among other things, to adjust the various surfaces in the model to better present the aquifer's hydrogeologic layers.

Once the model has been updated with the new data, it will be better suited for running simulations of different water or land management scenarios as well as predictions for climate and precipitation fluctuations. Lateral and vertical connectivity between aquifer layers and connections to surface water features will be more accurate and help identify areas of the basin where groundwater recharge may be needed. Overall, this will help shape management actions by focusing their efforts on those particular areas. Ongoing updates to the model will emphasize the importance of accurate and up-to-date data and help continue monitoring efforts such as measuring water levels and stream flows.

An updated groundwater model is vital for running accurate simulations that may be used to make important decisions regarding groundwater allocation, pumping, recharge, and other activities. The model should contain the most up-to-date data to represent the basin realistically and accurately.

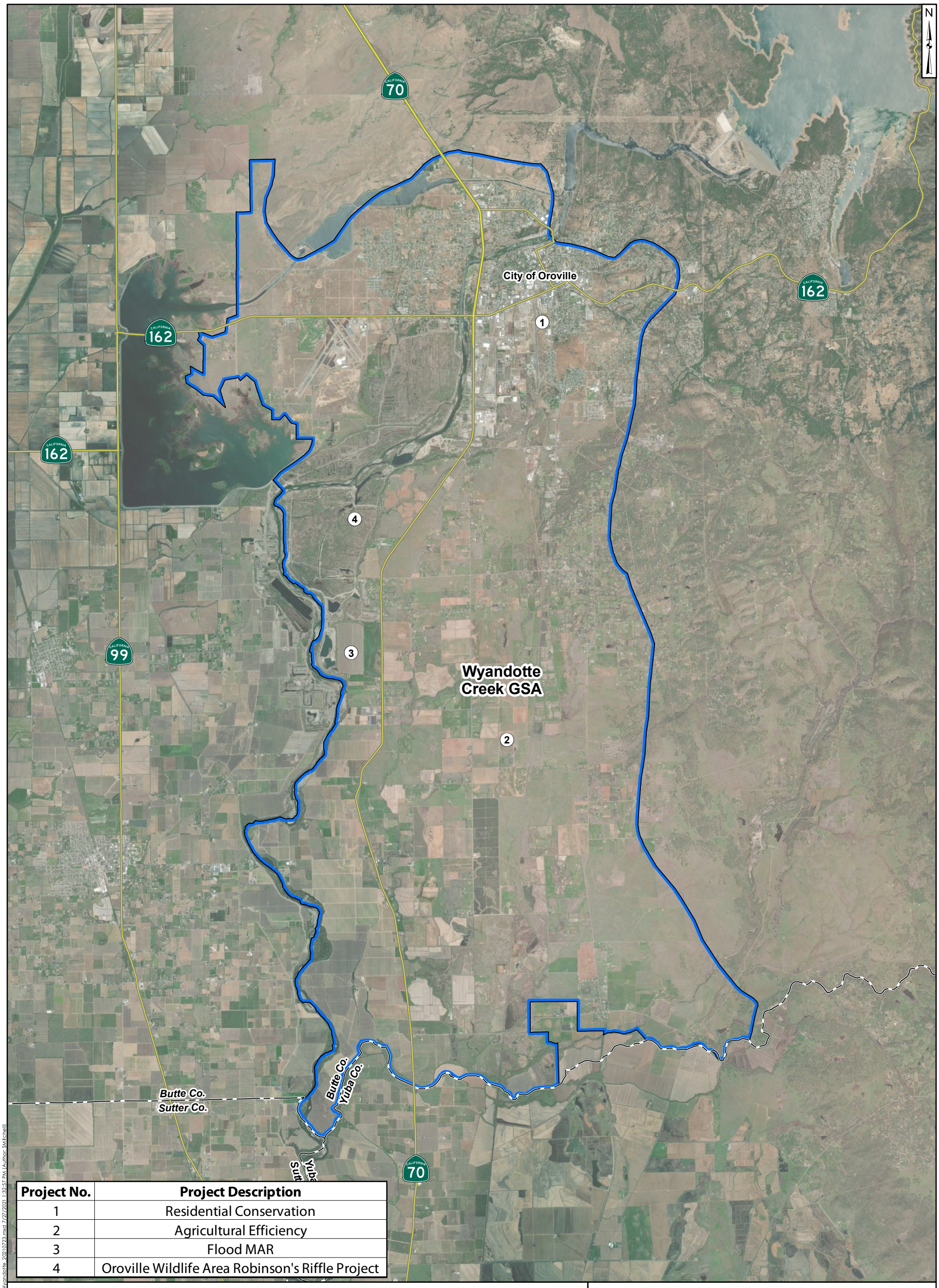
6.5 Adaptive Management Strategies

The Wyandotte Creek GSA will be requesting annual reports from the project proponents to evaluate progress on implementation. If the projects are not progressing or if monitoring efforts demonstrate that those projects are not achieving their targets, the GSA will evaluate the need for additional or modified projects and to begin implementation of management actions.

6.6 Potential Available Funding Mechanisms

As listed above in the individual project descriptions, several funding mechanisms have been identified to help with the planning and implementation of the GSP projects. The following is an abbreviated list of some of the funding mechanisms proposed:

Project Type	Funding Type	Program	Dates
IRWM (projects included in an adopted IRWMP)	Implementation grant	Proposition 1, Water Quality, Supply, and Infrastructure Improvement Act of 2014	Round 2 solicitation expected in late 2021
Recharge Projects	Planning and construction grants	Proposition 68, California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018	Round 2 solicitation to be released early 2022
Wastewater Treatment for URC Projects	Planning and construction grants	Small Community Grant Fund	Applications accepted continuously
Public Water Systems Improvement	Planning and construction grants	Drinking water grants	Applications accepted continuously
Land Conservation	USDA Farm Service Agency	Conservation Reserve Program	Applications accepted continuously



Project No.	Project Description
1	Residential Conservation
2	Agricultural Efficiency
3	Flood MAR
4	Oroville Wildlife Area Robinson's Riffle Project

Legend

- Planned Project
- Highways
- *Groundwater Sustainability Agency (GSA)*
- County boundaries
- Wyandotte Creek GSA

2 1 0 2 Miles

Planned Projects
Wyandotte Creek GSA

Geosyntec consultants

Project No.: SAC282 | July 2021

Figure 6-1

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Project No.	Project Description
5	Intra-Basin Water Transfer
6	Streamflow Augmentation
7	Agricultural Surface Water Supplies
8	Palermo Clean Water Improvement Project
10	Well Upgrades
11	TWSD Water Treatment Plant Expansion
12	Hydrant Metering to Reduce Non-Beneficial Consumptive
13	Fuel Management for Watershed Health
14	Removal of Invasive Species

Legend

- Potential Project
- Highways
- *Groundwater Sustainability Agency (GSA)*
- County boundaries
- Wyandotte Creek GSA

2 1 0 2 Miles

Potential Projects
Wyandotte Creek GSA

Geosyntec consultants

Project No.: SAC282 | July 2021

Figure **6-2**

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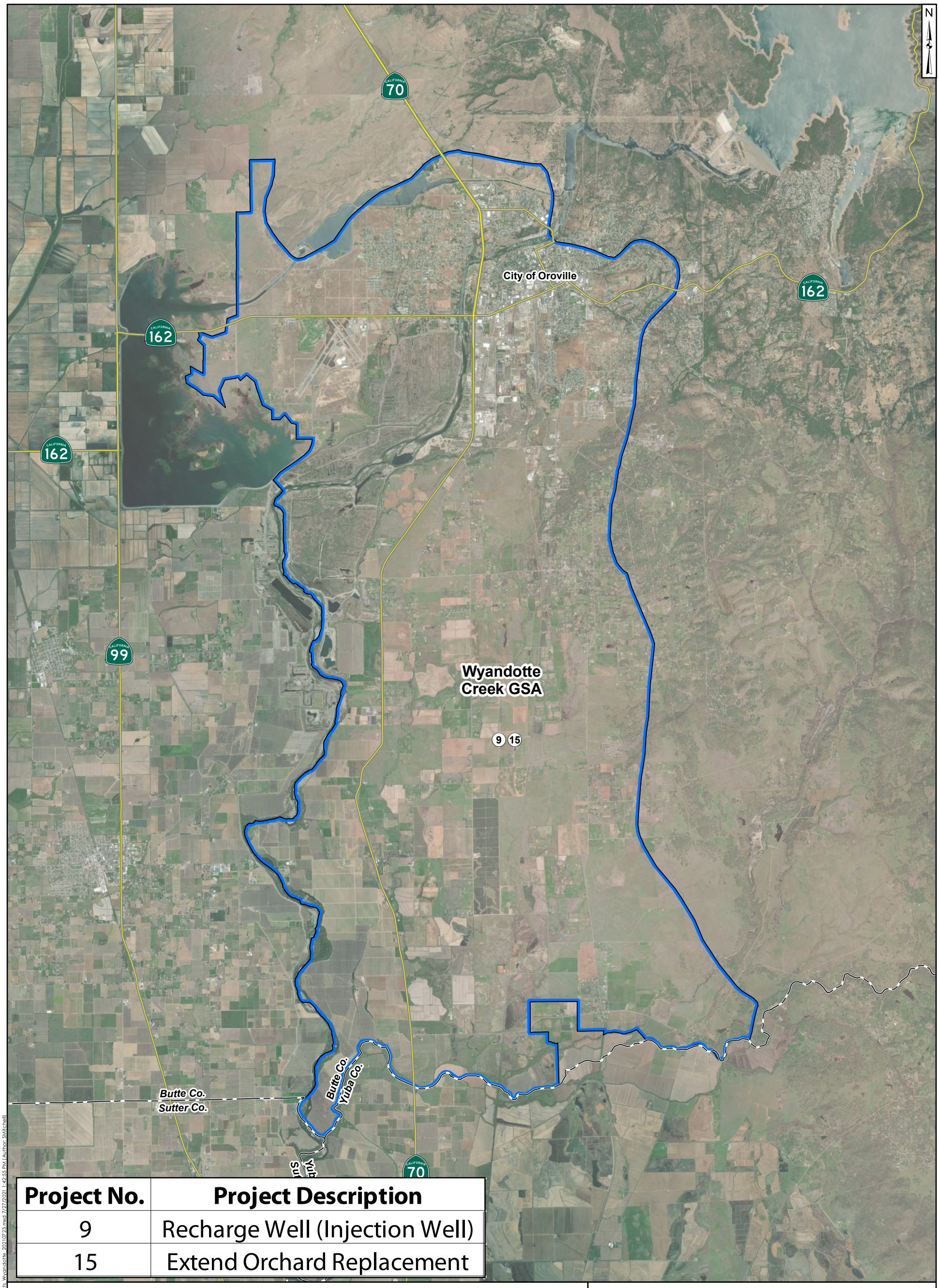

Project No.	Project Description
9	Recharge Well (Injection Well)
15	Extend Orchard Replacement

Legend

Conceptual Project

Highways

Groundwater Sustainability Agency (GSA)

County boundaries

Wyandotte Creek GSA

2 1 0 2 Miles

Conceptual Projects
Wyandotte Creek GSA

Geosyntec consultants

Project No.: SAC282 | July 2021

Figure 6-3

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Wyandotte Creek GSA Advisory Committee Meeting

Access meeting materials at: https://www.wyandottecreekgsa.com/

Meeting Brief

- **Overview:** The Wyandotte Creek Groundwater Sustainability Agency (GSA) Advisory Committee (WAC) met virtually on August 5, 2021 [Access Recording Here].
- **Projects and Management Actions (PMAs):** The WAC received an overview and provided input on the PMA draft chapter. WAC members provided recommendations to the Wyandotte Creek GSA Board on project ranking and PMAs for inclusion in the Groundwater Sustainability Plan (GSP). The public had an opportunity to provide comment [Access PMA Draft Chapter Here; Access PMA Presentation].
- **Implementation Chapter:** The WAC discussed the draft Implementation Chapter outline and considered recommendations on implementation components, including inter-basin coordination [Access Implementation Slides; Inter-basin Coordination Slides; and Inter-basin Coordination Report and Cover Letter]. The public had an opportunity to provide comment.
- **Wyandotte Creek GSA Management Committee Reports:** The Management Committee provided verbal updates.
- **Next Steps:** The WAC will meet again via video conference on September 2, 2021, from 9:00-12:00.

Action Items

Item	Lead Person(s)	Completion
Upload meeting recording to the website.	Chris Heindell (Thermalito Water and Sewer)	Complete Access Here
Finalize June WAC Meeting Summary and upload to the website.	CBI & Management Committee	Complete Access Here
Communicate WAC recommendations and incorporate suggested changes related to the PMA draft chapter to the GSA Board. These include: ▪ Coordinate with Kristen McKillop, David Kehn, and Chris Heindell to modify PMA #12 Hydrant Metering to ensure it accurately characterizes the desire to focus on water loss control ▪ **Intra-basin** not inter-basin ▪ Change Palermo project to planned not potential ▪ **Recommendations:** ○ Only rank the projects planned, retaining the rest in the list without ranking ○ Soften language around the GSA role re: management actions ○ Remove Large Well Moratorium and Groundwater Allocation from Management Action table	Technical Consulting Team & Management Committee	

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Summary

Introductions & Agenda Review

The facilitator, T. Carlone (Consensus Building Institute, CBI) welcomed participants and reviewed the meeting agenda.

Public Comment for Items Not on the Agenda

- A member of the public expressed concern with the Sustainable Management Criteria, particularly related to the Minimum Thresholds (MT) set for Lowering Groundwater Levels. This member of the public referred to the three periods of drought reflected in the graphs and shared concerns about having the MT approximately 20 ft below those levels. The participant encouraged the group to consider acting prior to reaching currently set thresholds and shared they had submitted written comments to C. Buck (Butte County).

Meeting Notes Review & Consideration

WAC members reviewed and approved the July 1, 2021, meeting summary [Access Here].

Projects and Management Actions (PMAs) Draft Chapter Overview & Recommendations

The WAC received an overview and provided input on the PMA draft chapter. WAC members provided recommendations to the Wyandotte Creek GSA Board on project ranking and PMAs for inclusion in the Groundwater Sustainability Plan (GSP). The public had an opportunity to provide comment [Access PMA Draft Chapter Here; Access PMA Presentation].

The PMA Chapter first describes the process to identify projects, the expected benefits, how those projects would be measured, how the projects contribute to the Measurable Objectives (MO), existing regulatory processes, proposed timing and schedule, legal authority, costs, and funding availability. The level of detail included in the chapter depends on the amount of information submitted by the project proponents. In addition, A. Hussein (Geosyntec) emphasized the role of the GSA may vary by project; for example, the GSA may be leading a project or just provide coordination and oversight.

The table below outlines the proposed project prioritization, as presented during the meeting. It includes project description, proponent, anticipated acre-feet of annual water gains, and status (planned, potential, or conceptual). The ranking of projects was included due to existing funding requirements; yet, the proposed ranking may change with evolving circumstances, such as funding availability or changing conditions.

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Table 1. Project ranking as presented during the 8/5/21 meeting

#	Project Description	Proponent	Acre-Feet	Planned/ Potential	WAC Project-specific Input & Discussion
1	Residential Conservation	California Water Service	100	Planned	• [From July WAC Meeting] Change proponent to Wyandotte Creek GSA
2	Agricultural Irrigation Efficiency	Wyandotte Creek GSA (WCGSA)	1,000	Planned	
3	Flood-MAR	WCGSA	TBD	Planned	
4	Orville Wildlife Area Robinson's Riffle Project	Sutter FCA, GSSA	TBD	Planned	
5	Inter-basin Water Transfer	TWSD	5,000	Potential	• Modify title to intra-basin not inter-basin transfer.
6	Streamflow Augmentation	WCGSA	TBD	Planned	
7	Agricultural Surface Water Supplies	WCGSA	TBD	Potential	
8	Palermo Clean Water Improvement Project	Butte County	TBD	Potential	• [From July WAC Meeting] Add South Feather Water & Power as proponent as well
9	Recharge Well	TWSD	TBD	Conceptual	• D. Williams (ag. water user) asked for specific information and details on project location. He suggested moving this item to the bottom of the list. A. Hussein (Geosyntec) clarified this project would entail capturing floodwater for direct or in-lieu recharge. The location would depend on surface water holders' interest and may change during different wet years. • N. Johansson (ag. water user) would like more information about injection wells and the potential for water quality implications and water ownership. • D. Sherwood (ag. water user) shared he has heard about positive experiences with recharge wells in the Klamath Basin.
10	Well Upgrades	TWSD	TBD	Potential	

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11	TWSD Water Treatment Plan Expansion	TWSD	TBD	Planned	
12	Hydrant Metering	South Feather Water & Power	TBD	Planned	• D. Sherwood (ag. water user) asked for clarification given existing construction meters across the Oroville area. He found this PMA unclear. • K. McKillop (South Feather Water and Power) highlighted recent change in policies, as the issue related to non-beneficial uses of available domestic water supplies is prevalent across the state. Fire hydrant metering may not be the best solution to the problem of water loss/theft. The issue has various layers and multiple agencies are grappling with the consequences and potential solutions. It may be beyond the GSA's role to solve. K. McKillop fully supports maintaining the project listed, as it supports water management, particularly as it relates to surface water/groundwater depletion. She would like to clarify this is not exclusive to South Feather Water and Power, but it is interfering with the agency's conservation efforts. • D. Sherwood (ag. water user) suggested modifying the PMA to include hydrants and other illegal water use, instead of removing it. He has directly witnessed water trucks gathering water from fire hydrants for illegal uses. The PMA could be modified to better reflect the objective. • N. Johansson (ag. water user) has also witnessed similar experiences with water trucks and highlighted these users have permits, which limit law enforcement's ability to intervene. She wondered what is the GSA's authority in limiting/managing such uses? • A. Hussein (Geosyntec) suggested refining the language to describe the project proponents' focus on promoting/encouraging policy solutions that reduce and manage groundwater pumping. The GSA could help find funding sources and other strategies to regulate and manage water use; yet, the GSA would not have the authority without direct input from project proponents.

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					• D. Kehn (CalWater) suggested changing the title to "Water Loss Control" and include metering as a strategy, as it would be difficult to account for water loss in the system without metering. C. Heindell (TWSD) supports changing the name and including the project in the plan to encompass unlawful water use and/or water loss control. • D. Sherwood (ag. water user) suggested looking into the permitting applications. P. Vellines (DWR) echoed that idea and shared there needs to be a way to link a water permit to a cannabis permit. A potential tool (Management Action) could include checking water permits are tied to legal cannabis grows. **Next Steps:** A. Hussein (Geosyntec) will coordinate with representatives from the three entities (C. Heindell from Thermalito Water and Sewer District, K. McKillop from South Feather Water & Power, and D. Kehn CalWater) to modify this project to ensure it accurately characterizes the desire to focus on water loss control.
13	Fuel Management for Watershed Health	WCGSA, BC Fire Safe Council, BCRCD	TBD	Potential	• D. Sherwood (ag. water user) clarified whether this item referred to prescribed burns and additional grazing. A. Hussein (Geosyntec) clarified it relates to the protection of the upper watershed to promote/maintain watershed health across subbasin boundaries.
14	Removal of Invasive Species	WCGSA	TBD	Potential	• D. Sherwood (ag. water user) asked for more information on what specific plant species are being referred to. A. Hussein (Geosyntec) shared the project would entail mapping effort to ID invasive species/native grasses, then tracking invasive to assess impacts to water supply and quality.
15	Extend Orchard Replacement	WCGSA	TBD	Conceptual	
Total			**6,100**		

General WAC Comments & Input

- D. Kehn suggested including an additional column highlighting project participants or partners, in addition to proponents.
- K. McKillop (South Feather Water and Power) suggested categorizing the PMAs differently to illustrate PMA benefits and contributions to specific SMC and to better communicate the

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information to the public. It would be most important to communicate clearly, what each PMA intends to do or support, as well as how it ties to the previous GSP components.

WAC Recommendations to the GSA Board

WAC Recommendations	WAC Member Support
1. Only rank planned projects (not potential or conceptual)	Yes: D. Kehn, D. Sherwood, D. Williams, N. Johansson

Public Comments

- A member of the public offered various suggestions related to the table above.
    - Move #1 Residential Conservation lower down the list. Grant money should not be sought to support for-profit companies (e.g., CalWater), certainly not as the top priority.
    - Modify the priority list based on highest anticipated impact. Specifically, set Agricultural Irrigation Efficiency as the top priority; set Hydrant Metering (once modified) as #2, and residential conservation as #3.
    - Address concerns related to water theft/loss and prioritize reconciling water permitting process to distinguish legal water use from water theft immediately.
    - Consider including projects focusing on reclaiming/recycling water.
    - Include additional information in the table to ensure the reader can accurately understand what the project is about. For example, rename #13 above to Management for Overall Watershed Health, and #14 to "mapping of invasive species" rather than removal of.

Management Actions

The table below shows the proposed management actions as presented during the 8/5/21 WAC meeting.

#	Action	Lead Agency	WAC Project-specific Input & Discussion
1	Update Butte County & City of Oroville General Plan	Butte County and City of Oroville	• N. Johansson (ag. water user) asked whether specific components of the General Plan have implications for the GSP. A. Hussein (Geosyntec) highlighted Chapter 1 will describe specific items in the General Plan applicable to the GSA. • D. Williams (ag. water user) would like greater specificity and more information. • N. Johansson (ag. water user) asked how this management action would move forward and who would be responsible. C. Buck (Butte County) shared there would be staff cross-over. Butte County Department of Water and Resource Conservation staff has participated in the General Plan's Water Element update discussions. The GSP would establish a direct link and require greater understanding of policy implications and clear lines of communication.

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2	Domestic Well Mitigation	Wyandotte Creek GSA	• D. Williams (ag. water user) would like greater specificity and more information. • N. Johansson (ag. water user) asked about the reported number of domestic wells that have gone dry in Wyandotte Creek. C. Buck (Butte County) shared, so far there are about 3-4 reports of dry wells located mainly in the Palermo area. • WAC members suggested greater clarity about the connection between SMC and the PMAs. C. Buck (Butte County) shared the SMC set the framework for groundwater conditions in the basin. The goal for the PMAs would be to avoid reaching the MT. Yet, the GSA needs to recognize the MT is set up lower than the levels of some existing domestic wells, so it will be key to set up programs to address and mitigate the impacts to domestic wells. • In terms of tracking, WAC members wondered if a voluntary well registration program should be part of the implementation portion of the plan.
3	Amend the Well Permitting Ordinance	Butte County	• D. Williams (ag. water user) would like greater specificity and more information. • C. Buck (Butte County) shared more details would be developed if the GSA decides to engage and pursue this management action during GSP implementation.
4	Landscape Ordinance	Butte County & City of Oroville	• N. Johansson (ag. water user) shared she worked on a plan focused on sustainable landscaping strategies (e.g., native plans, etc.) and can add additional ideas. • D. Sherwood (ag. water user) did not support this management action. He suggested softening the language to indicate drought resilience planning, and expressed concern with limiting the size of grass turf. • D. Kehn (CalWater) supported keeping this management action separate from the General Plan update. He would like to change the language to be less restrictive and encourage reporting. This item can target new large developments in the area. K. Peterson (Butte County) shard that while the City of Oroville and Butte County would have the jurisdiction to enact this action, the GSA could make a request to the city and County to act and focus on new development. • K. McKillop (South Feather Water and Power) shared water agencies are in the process of reviewing data for a state-wide landscape area estimate to look at domestic irrigable acreage and will provide refined data when available (in the next 2 years).
5	Promote expansion of service area of water purveyors	Wyandotte Creek GSA	

6	Large Well Moratorium	Butte County	• D. Kehn (CalWater) shared Glenn County implemented a similar moratorium, which did not necessarily minimize water use. Instead, users were drilling more small wells, instead of single large wells. D. Kehn suggested instead looking into a well-drilling mitigation program, or some sort of mitigation requirement after a new well is drilled. • K. McKillop (South Feather Water and Power) shared the County has already established a well-spacing requirement. She suggested exploring existing policies and acknowledging all the great work underway led by Butte County. • N. Johansson (ag. water user) echoed concerns and acknowledged the policies in place that protect local groundwater. • D. Williams (ag. water user) shared his concern with this management action, particularly related to the challenges of restoring collapsed wells.
7	Groundwater Allocation	Wyandotte Creek GSA	• D. Kehn shared this Management Action should be considered as a worst-case scenario strategy. • K. McKillop (South Feather Water and Power) is not supportive of this action.

General Questions/Recommendations:

- K. McKillop (South Feather Water and Power) expressed concern with the lack of a solid data foundation and proper understanding to pursue some of the management actions delineated above. Particularly, she expressed concern with indicating in the plan the GSA would take an active role, beyond monitoring, communicating, and coordinating as needed to strengthen a foundational understanding of groundwater management. C. Buck (Butte County) suggested modifying the language to address this concern by softening and broadening the language on the GSA role on, for example, pursuing an update to the well permitting ordinance.

WAC Recommendations	WAC Member Support
1. Soften the language around the GSA role to indicate the GSA intends to monitor, participate, and coordinate with respective agencies.	• Yes: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson
2. Remove #4 landscape ordinance.	• Remove: NA • Keep: D. Kehn • Neutral: K. McKillop, N. Johansson, D. Sherwood, D. Williams; these WAC members suggested including additional language to indicate decisions and recommendations would be driven by data and improved understanding.
3. Remove management action #6 Large Well Moratorium from the list	• Yes: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson

4. Remove management action #7 Groundwater Allocation	• Yes: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson

Public Comment

- A member of the public shared some well owners are reluctant to report dry wells, as this might invite the government intervening. People would like to stay on land and figure out ways to get enough water when conditions improve, so they do not lose their investments. This public participant suggested finding a way to address and mitigate these concerns. Further, they shared current drought conditions have pushed the needle towards more action. It is important to communicate sustainable groundwater management will be key to transcend drought and fire conditions.

Outcome & Next Steps:

- A. Hussein (Geosyntec) will coordinate with representatives from the three water entities (C. Heindell from Thermalito Water & Sewer District, K. McKillop from South Feather Water & Power, and D. Kehn CalWater) to modify project #12 Hydrant Metering to ensure it accurately characterizes the focus on water loss control.
- The Management Committee will present the WAC recommendations and the compilation of public comments to the GSA Board for consideration at the next Wyandotte Creek Board Meeting.

Implementation Chapter

The WAC discussed the draft Implementation Chapter outline and considered recommendations on implementation components, including inter-basin coordination [Access Implementation Slides; Inter-basin Coordination Slides; and Inter-basin Coordination Report and Cover Letter]. The public had an opportunity to provide comment.

Draft Implementation Outline

- **Estimate of GSP Implementation Costs**
- **Identify Funding Alternatives**
- **Schedule for Implementation**
  - **Schedule for Project Implementation**
  - **Schedule to Address Data Gaps**
- **Annual Reporting**
- **Inter-basin Coordination**
- **Periodic Evaluations**

Inter-basin Coordination

C. Buck led a presentation focused on the Northern Sacramento Valley Inter-basin Coordination Framework and received recommendations on inter-basin coordination priorities for the Wyandotte Creek Subbasin. WAC members provided input/recommendations on which pillars should be included or emphasized in the draft GSP description of intended inter-basin coordination as part of plan implementation. WAC members discussed the proposed "Pillars" from the Northern Sacramento Valley Inter-Basin Coordination Report in relation to the Wyandotte Creek Subbasin and its neighbors. The full report is available here.

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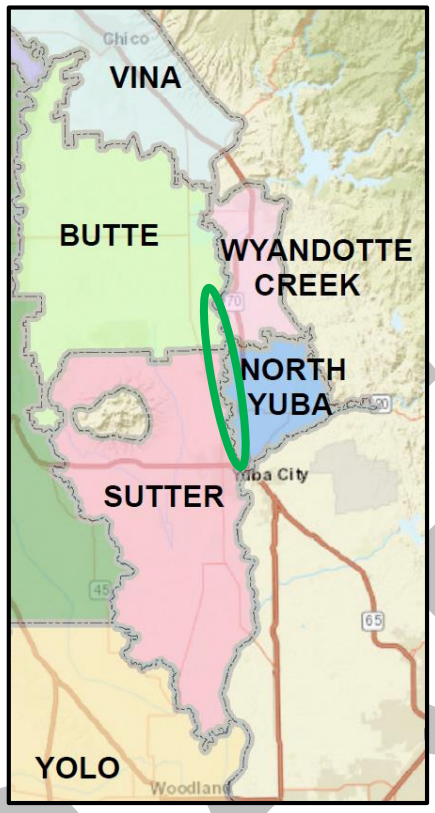
As shown in the map to the right, the Wyandotte Creek Subbasin neighbors include the Butte Subbasin, Sutter Subbasin, and North Yuba Subbasin. Coordination could also focus on the Feather River Corridor (Butte, Wyandotte Creek, North Yuba, Sutter).



Pillars – North Sacramento Valley Report	WAC Input & Recommendation
1. Information-sharing a. Inform each other on changing conditions (i.e., surface water cutbacks, land use changes, policy changes that inform groundwater management) b. Share annual reports and interim progress reports c. Share data and technical information and work towards building shared data across and/or along basin boundaries (e.g., monitoring data, water budgets, modeling inputs and outputs, and Groundwater Dependent Ecosystems)	• Most relevant to direct neighbors: Butte and North Yuba Subbasins • N. Johansson (ag. water user) suggested clearly indicating how often the information would be exchanged and through what avenues/channels. **Recommendation: Wyandotte Creek Subbasin will work with GSA staff of Butte and North Yuba subbasins to identify lines of communication and methods for information sharing** In support: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson
2. Joint analysis & evaluation *a.* Evaluate and compare contents of GSPs with a focus on establishing a common understanding of basin conditions at boundaries	• Scope: Feather River Corridor Group • **Recommendation: Wyandotte Creek Subbasin intends to pursue funding and collaboratively work with subbasins in the Feather River Corridor group to** **a.** Contract with a consultant to conduct this work

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b. Identify significant differences, uncertainties, and potential issues of concern related to groundwater interaction at the boundaries *c.* Engage in analysis and evaluation of SMCs between GSPs to assess impacts and identify significant differences and possible impacts between subbasins that could potentially lead to undesirable results	**b.** Evaluate and compare contents of GSPs with a focus on establishing a common understanding of basin conditions at boundaries **c.** Identify significant differences, uncertainties, and potential issues of concern related to groundwater interaction at the boundaries **d.** Engage in analysis and evaluation of SMCs between GSPs to assess impacts and identify significant differences and possible impacts between subbasins that could potentially lead to undesirable results <u>Suggestions:</u> • Clarify intent to pursue grant funding • In support: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson
3. Coordination on mutually beneficial activities a. Communicate, coordinate, and collaborate on mutually beneficial activities, which could include joint monitoring, joint reporting, regional modeling, and other efforts to address data gaps at subbasin boundaries b. Collectively pursue funding and collaborate on mutually agreed upon projects and management actions that provide benefits across boundaries c. Leverage existing collaboratives (NSV IRWM, NCWA etc.)	• Scope: Feather River Corridor Group • **Recommendation: Work collaboratively with Feather River Corridor subbasins to identify items in our GSPs that are ripe for a coordinated project and pursuit of funding:** ○ Projects and Management Actions ○ Data Gaps→ new monitoring wells, stream gaging etc. • Wyandotte Creek will pursue grant funding to support a consultant to conduct this work • Wyandotte Creek will work collaboratively with the Northern California Water Association (NCWA) in their efforts to pursue funding and support local and state agency activities to identify and fill regional data gaps <u>Suggestions:</u> • Add "and other" after NCWA. Some stakeholders in the County expressed distrust with some agencies represented in NCWA that would like to promote water transfers. • Specify intent to collaborate on monitoring beyond filling data gaps. • Use language that indicates proactive approach, beyond monitoring. • In support: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson
4. Coordinated communication and outreach a. Coordinate and collaborate on regional-scale public engagement and communication strategies that promote awareness on groundwater sustainability, enhance public trust, and maintain institutional knowledge b. Maintain list of GSP/subbasin staff contacts and websites	• Scope: Regional: subbasins in the Northern Sac Valley, Feather River Corridor group **Recommendation: Wyandotte Creek GSA staff will continue to participate in regional public engagement activities and efforts related to implementation of SGMA in the Northern Sacramento Valley.** • In support: D. Kehn, D. Sherwood, D. Williams, K. McKillop, N. Johansson

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5. Issue-resolution process a. Establish and follow an agreed-upon process for identifying and resolving conflicts between GSAs by the first five-year update [Refer to Appendix D for more details and discussion prompts on issue resolution processes]	WAC Comments & Suggestions: • N. Johannsen (ag representative): Consider resources needed to support third-party support. Learn from current experiences with emergency management and the fire safe council; counties have been coordinating well and establishing shared budgets. She suggested having a plan in place, as it would be more expensive to resolve after the conflicts emerge. She encouraged a proactive approach. • D. Kehn (CalWater): supports a layered approach, starting with a gentle approach to resolve conflicts. He supports establishing the process before conflicts emerge but suggested the GSA Board should make the decision related to this pillar. • D. Williams (ag. water user) would like to have a plan in place that is flexible and outlines various options. • D. Sherwood (ag. water user) believes it is premature to develop an issue resolution process and would like to wait.

Wyandotte Creek GSA Management Committee Reports

The Management Committee provided quick verbal updates. The Wyandotte Creek GSA Board will meet on August 26th and will receive the WAC's comments and recommendations. Further, the Board will receive comments on the Implementation Chapter. More information available at: https://www.wyandottecreekgsa.com/

Next Meeting

The WAC will meet again via video conference on September 2, 2021, from 9:00-12:00.

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Meeting Participants

Participant	Representation/Affiliation	Present
Wyandotte Creek GSA Advisory Committee (WAC) Members		
David Kehn	California Water Service	Y
Darin Williams	Agricultural Water User	Y
Duke Sherwood	Agricultural Water User	Y
Kristen McKillop	South Feather Water and Power	Y
Nicole Johansson	Agricultural Water User	Y
Groundwater Sustainability Agency (GSA) Member Agency Staff		
Christina Buck	Butte County	Y
Kelly Peterson	Butte County	Y
Matt Thompson	City of Oroville	Y
Chris Heindell	Thermalito Water and Sewer	Y
Technical Consultants		
Joe Turner	Geosyntec	Y
Amer Hussein	Geosyntec	Y
State Agencies		
Pat Vellines	Department of Water Resources (DWR) Northern Region Office	Y
Facilitator		
Tania Carlone	Consensus Building Institute	Y
Mariana Rivera-Torres	Consensus Building Institute	Y

Approximately 1 member of the public participated.

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Wyandotte Creek Groundwater Sustainability Agency Agenda Transmittal

TO: WYANDOTTE CREEK GSA BOARD

FROM: CHRISTINA BUCK

RE: OVERVIEW OF IMPLEMENTATION CHAPTER AND POSSIBLE RECOMMENDATIONS

DATE: 8/12/2021

SUMMARY

The sections of the Implementation Chapter include:
1) Estimate of GSP Implementation Costs
2) Identify Funding Alternatives
3) Schedule for Implementation
4) Data Management Systems
5) Annual Reporting
6) Evaluation Report (5 year GSP updates)
7) Inter-basin Coordination

Staff will describe the contents of the chapter and seek input from the GSA Boards on specific items. The attached slides include information on the implementation chapter content and light blue text highlights specific questions or issues for Board direction or possible recommendation. Based on Board input, the chapter will be drafted and included as part of the complete Groundwater Sustainability Plan to be released in early September for a 60 day public comment period.

This chapter includes a description of how the Wyandotte Creek subbasin intends to coordinate with neighboring subbasins. The Wyandotte Creek Advisory Committee reviewed and provided input on the proposed recommended approach presented in the slides.

DISCUSSION

None

FISCAL IMPACT

None

RECOMMENDATION

Requested Action: Direction to staff or possible recommendations on components of the Implementation Chapter including discussion and direction on Inter-basin Coordination.

ATTACHMENTS

Implementation Chapter Presentation Slides

Implementation Chapter

Overview of Contents and Seeking Direction from Wyandotte Creek GSA Board

August 12, 2021

Slides provided as backup material in meeting packet for preview of the topic.

Subject to change for presentation on August 26.

Agenda Item Scope

- Overview of Implementation Chapter Content
  - Receive input from the GSA Board
- Discussion of Inter-basin Coordination Pillars and how to characterize them in the Wyandotte Creek GSP
  - Receive input from the GSA Board
- Overall Goal: Receive direction/possible recommendations on the content of the Implementation Chapter that will be released with the complete GSP for public review in early September

GSA= Groundwater Sustainability Agency; GSP= Groundwater Sustainability Plan

Implementation Chapter of the GSP

Chapter Outline

1. Estimate of GSP Implementation Costs
2. Identify Funding Alternatives
3. Schedule for Implementation
4. Data Management Systems
5. Annual Reporting
6. Evaluation Report (5 year GSP updates)
7. Inter-basin Coordination

GSA= Groundwater Sustainability Agency; GSP= Groundwater Sustainability Plan

GSP Implementation Costs

- Administrative Costs- $150,000-300,000/yr [Member agencies in part]
- Monitoring Activities- $21,000/yr [DWR/BCDWRC]
- Data Analysis Activities- $10,000/yr [BCDWRC]
- Reporting and Evaluation Activities- $30,000/yr [BCDWRC in part]
  - 5 year Evaluation Report: $100,000
- Data Gaps- TBD
- Project and Management Actions- TBD

[]- indicates activities currently carried out by the specified entity
DWR= CA Department of Water Resources; BCDWRC= Butte County Dept. Water & Resource Conservation; Member Agencies=BCDWRC, City of Chico, Durham Irrigation District; and Rock Creek Reclamation District GSA

Administrative Costs

GSP Implementation	Estimated Annual Costs
Public Outreach	$15,000
Staff*	$100,000
Legal	$20,000
Facilities & Supplies	$15,000
Total Annual Estimate	$150,000

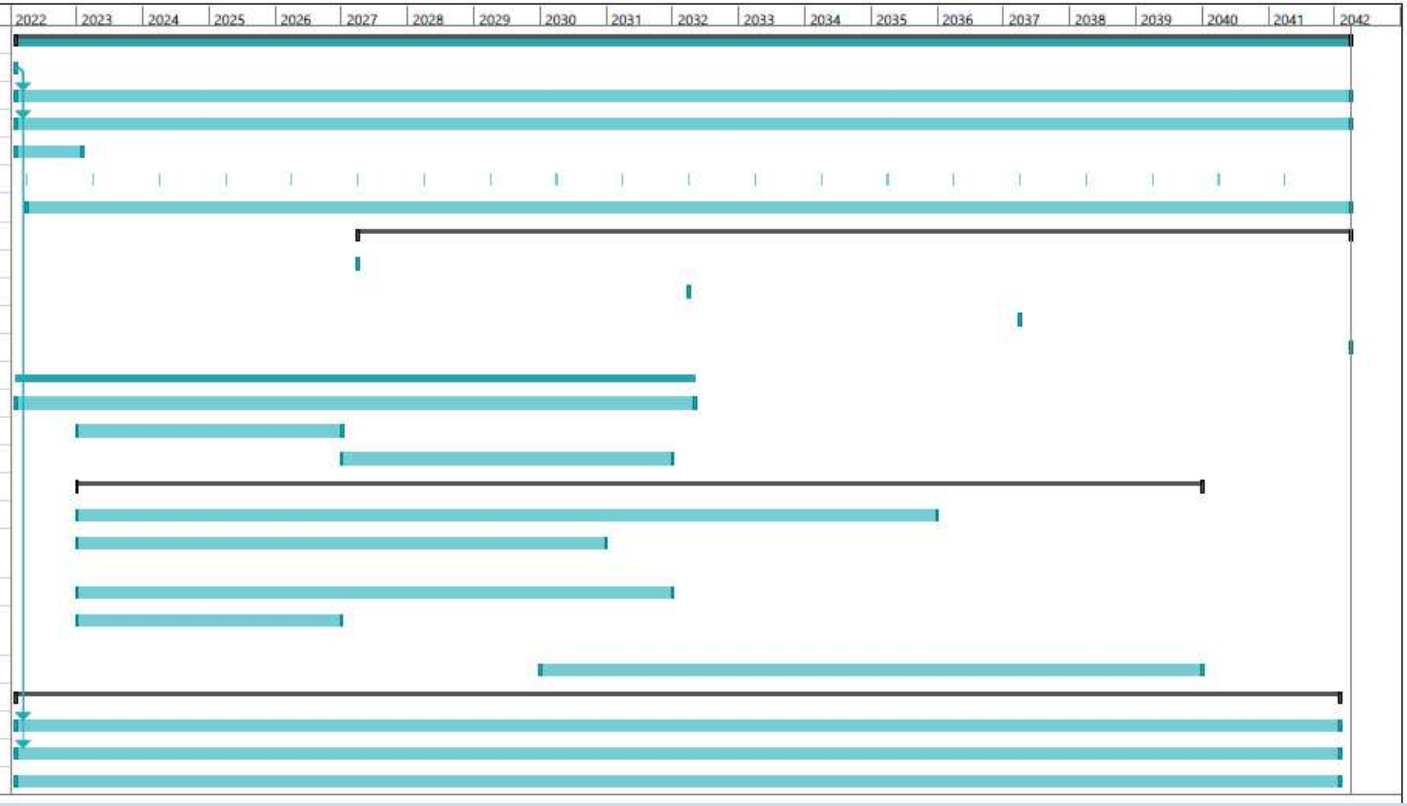
- * Includes costs associated with administration of GSA Board and advisory committee, project and program development, coordination among GSAs, grant development/administration

Identify Funding Alternatives

- Existing programs/activities, GSA member agency contributions, in-kind contributions
- State/Federal grant funding
  - Prop 68 SGMA Implementation grant
- "The GSA is evaluating Proposition 218 elections to support ongoing operational costs and to fund agency operations"
  - **How strong of language should be used in the chapter regarding intent to pursue Prop 218 assessment or other funding mechanisms? Is it planned? Potential?**
  - **Does the Board want the chapter to include a cost estimate for a funding alternatives assessment? (i.e. Prop 218 requires Engineering report, administering the election, outreach)**

7 Schedule for Implementation

ID	Task Name	Start	Finish
1	**GSP Implementation**	**1/31/22**	**4/1/42**
2	GSP Submittal	1/31/22	1/31/22
3	Public Outreach	2/1/22	4/1/42
4	Monitoring	2/1/22	4/1/42
5	Develop Intial DMS	2/1/22	2/1/23
6	**Annual Reports**	**4/1/22**	**4/1/42**
28	Interbasin Coordination	4/1/22	4/1/42
29	**Five Year Updates**	**4/1/27**	**4/1/42**
30	2027 Update	4/1/27	4/1/27
31	2032 Update	4/1/32	4/1/32
32	2037 Update	4/1/37	4/1/37
33	2042 Update	4/1/42	4/1/42
34	**Data Gaps**		
35	Contour Mapping	2/1/22	5/5/32
36	Update Butte Basin Model 1	1/1/23	1/3/27
37	Update Butte Basin Model 2	1/1/27	1/1/32
38	**Project Implementation**	**1/1/23**	**1/1/40**
39	Project 1: Residential Conservation	1/1/23	12/31/35
40	Project 2: Agricultural Irrigation Efficiency	1/1/23	1/1/31
41	Project 3: Flood MAR	1/1/23	12/31/31
42	Project 4: Oroville Wildlife Area Robinson's Riffle Project	1/1/23	12/31/26
43	Project 5: Streamflow Augmentation	1/1/30	1/1/40
44	**Adaptive Management**	**2/1/22**	**2/2/42**
45	Evaluate Potential Projects	2/1/22	2/2/42
46	Evaluate New Projects	2/1/22	2/2/42
47	Evaluate Management Actions	2/1/22	2/2/42



Board Input/direction? Any adjustments to timing to indicate priority of a certain project/activity?

8

Data Management Systems

- "Data Management System (DMS) that will be used is a geographical relational database that will include information on water levels, land elevation measurements, and water quality monitoring. The DMS will allow the GSAs to share data and store the necessary information for annual reporting."

- The current "DMS" would greatly benefit from an investment of time and resources to organize the data in a more accessible way to facilitate analysis, reporting, and data sharing.
- **Does the GSA Board support seeking grant funding to update the DMS?**
  - **Development of basic DMS to consolidate data sets to one place.**
  - **Estimated cost = $50,000**

GSP Implementation: Inter-basin Coordination Today's Topic

- Receive input/recommendations on which pillars should be included or emphasized in the draft GSP description of intended interbasin coordination as part of plan implementation
- Discuss proposed "Pillars" from the Northern Sacramento Valley Inter-basin Coordination Report in relation to the Wyandotte Creek Subbasin and its neighbors
- Proposed recommendations reflect input from the Wyandotte Creek Advisory Committee
- Report is Available Here: http://www.buttecounty.net/wrcdocs/planning/SGWMA/InterbasinCoordination/210707_NSV_IB_Coord_Report_Final.pdf

Wyandotte Creek Subbasin

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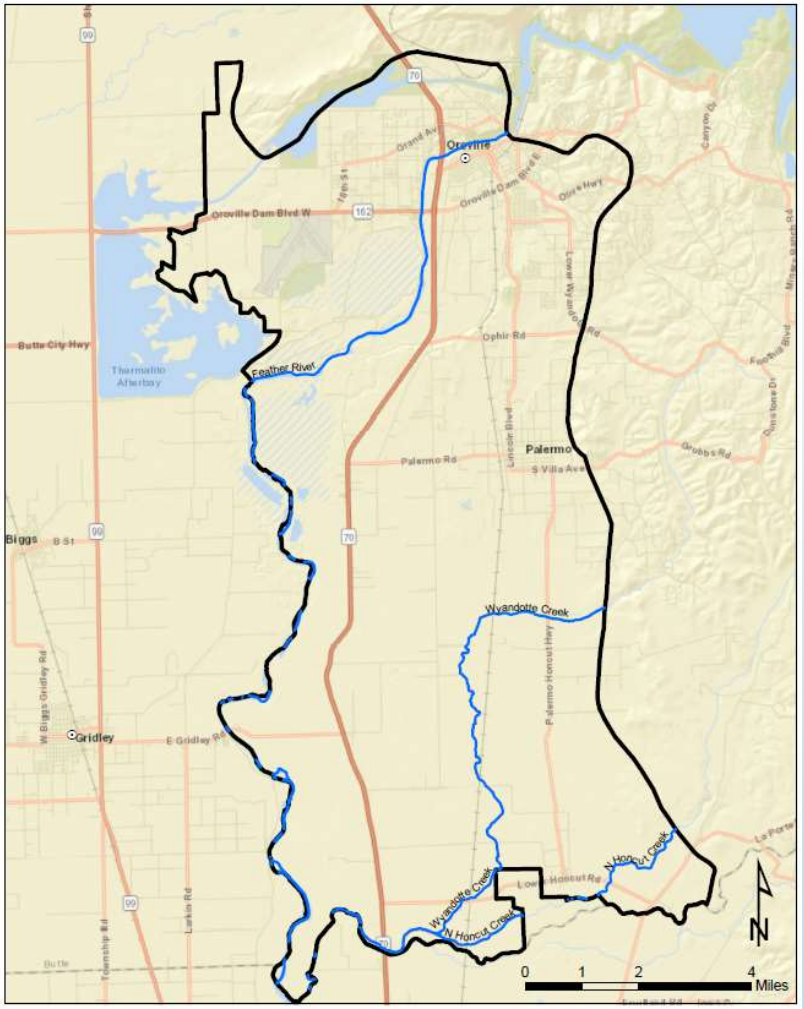

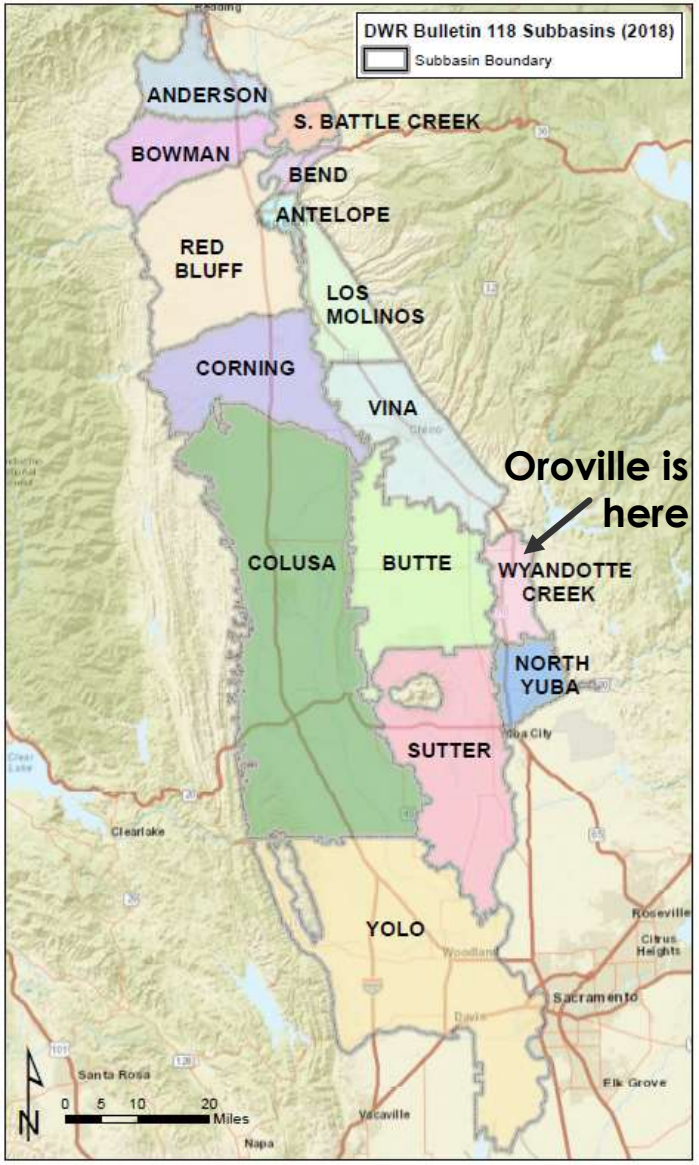

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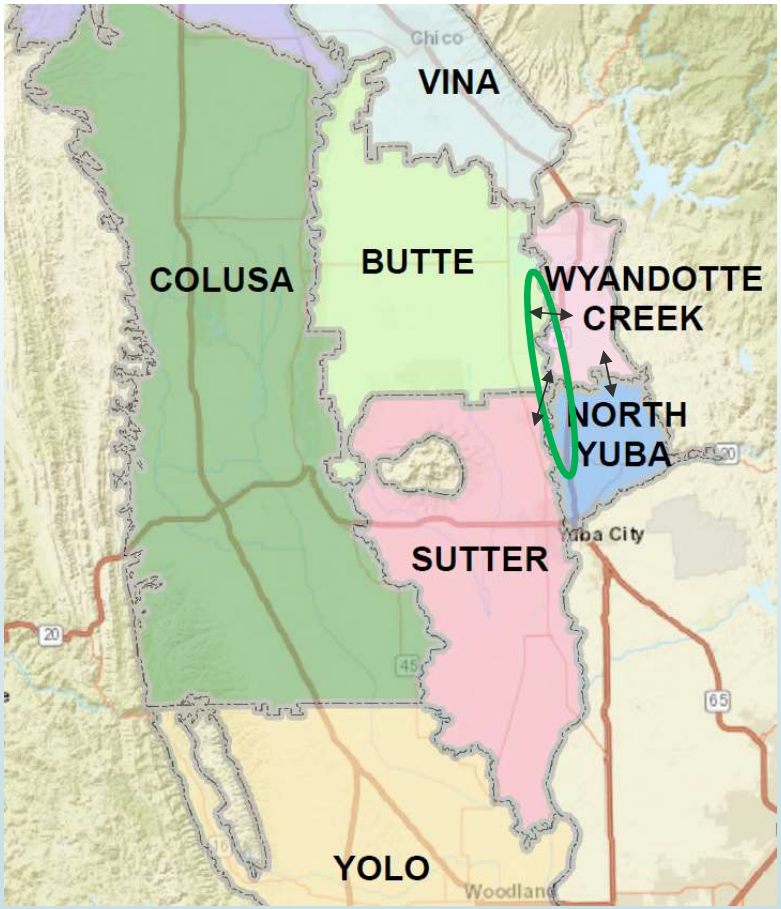
With which Subbasins do we Coordinate? What's the focus?

- Butte Subbasin
- Sutter Subbasin
- North Yuba Subbasin
- **Feather River Corridor** (Butte, Wyandotte Creek, North Yuba, Sutter)



Pillars: Menu of coordination topics/activities

Pillars	Scale(s)	Timing
1. Information-sharing a. Inform each other on changing conditions (i.e., surface water cutbacks, land use changes, policy changes that inform groundwater management) b. Share annual reports and interim progress reports c. Share data and technical information and work towards building shared data across and/or along basin boundaries (e.g., monitoring data, water budgets, modeling inputs and outputs, and Groundwater Dependent Ecosystems)	• Neighbor-to-neighbor • Coordination groups [Refer to section 4.1 below]	• *Ongoing (GSP Development)* • *Near-term (5-year update)* • *Long-term (GSP implementation)*
2. Joint analysis & evaluation a. Evaluate and compare contents of GSPs with a focus on establishing a common understanding of basin conditions at boundaries b. Identify significant differences, uncertainties, and potential issues of concern related to groundwater interaction at the boundaries c. Engage in analysis and evaluation of SMCs between GSPs to assess impacts and identify significant differences and possible impacts between subbasins that could potentially lead to undesirable results	• Neighbor-to-neighbor • Coordination groups [Refer to section 4.1 below]	• *Near-term (5-year update)* • *Long-term (GSP implementation)*
3. Coordination on mutually beneficial activities a. Communicate, coordinate, and collaborate on mutually beneficial activities, which could include joint monitoring, joint reporting, regional modeling, and other efforts to address data gaps at subbasin boundaries b. Collectively pursue funding and collaborate on mutually agreed upon projects and management actions that provide benefits across boundaries c. Leverage existing collaboratives (NSV IRWM, NCWA etc.)	• Neighbor-to-neighbor • Coordination groups • Regional: NSV IRWM, NCWA Groundwater Task Force	• *Ongoing (GSP Development)* • *Near-term (5-year update)* • *Long-term (GSP implementation).*
4. Coordinated communication and outreach a. Coordinate and collaborate on regional-scale public engagement and communication strategies that promote awareness on groundwater sustainability, enhance public trust, and maintain institutional knowledge b. Maintain list of GSP/subbasin staff contacts and websites	• Regional: NSV IRWM and NCWA Groundwater Task Force	• *Ongoing (GSP Development)* • *Near-term (5-year update)* • *Long-term (GSP implementation)*
5. Issue-resolution process a. Establish and follow an agreed-upon process for identifying and resolving conflicts between GSAs by the first five-year update [Refer to Appendix D for more details and discussion prompts on issue resolution processes]	• Neighbor-to-neighbor • Coordination groups	• *Near-term (5-year update)* • *Long-term (GSP implementation).*

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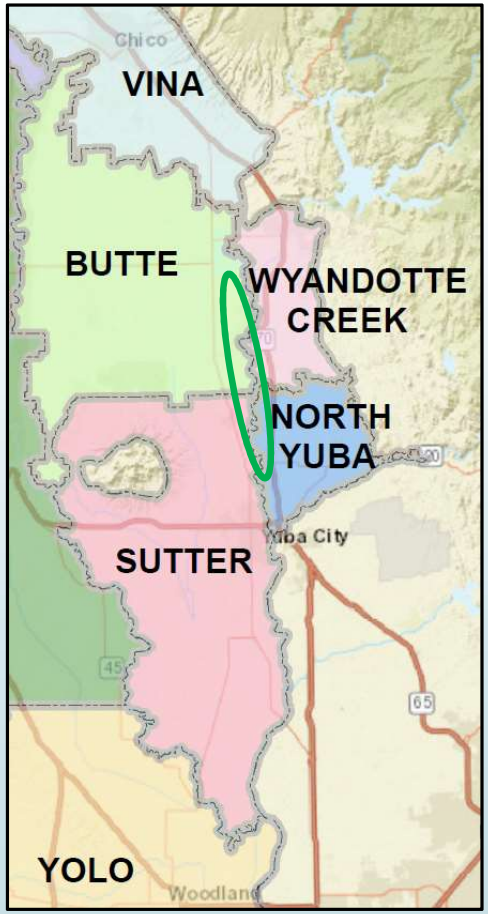
Pillar 1. Information Sharing

Pillars	Scale(s)	Timing
1. Information-sharing a. Inform each other on changing conditions (i.e., surface water cutbacks, land use changes, policy changes that inform groundwater management) b. Share annual reports and interim progress reports c. Share data and technical information and work towards building shared data across and/or along basin boundaries (e.g., monitoring data, water budgets, modeling inputs and outputs, and Groundwater Dependent Ecosystems)	• Neighbor-to-neighbor • Coordination groups [Refer to section 4.1 below]	• *Ongoing (GSP Development)* • *Near-term (5-year update)* • *Long-term (GSP implementation)*



- Most relevant to direct neighbors: Butte and North Yuba Subbasins

Recommendation: Wyandotte Creek Subbasin will work with GSA staff of Butte and North Yuba subbasins to identify lines of communication and methods for information sharing

Pillar 2. Joint analysis & evaluation

2. Joint analysis & evaluation a. Evaluate and compare contents of GSPs with a focus on establishing a common understanding of basin conditions at boundaries b. Identify significant differences, uncertainties, and potential issues of concern related to groundwater interaction at the boundaries c. Engage in analysis and evaluation of SMCs between GSPs to assess impacts and identify significant differences and possible impacts between subbasins that could potentially lead to undesirable results	• Neighbor-to-neighbor • Coordination groups [Refer to section 4.1 below]	• *Near-term (5-year update)* • *Long-term (GSP implementation)*

Pillar 2. Joint analysis & evaluation

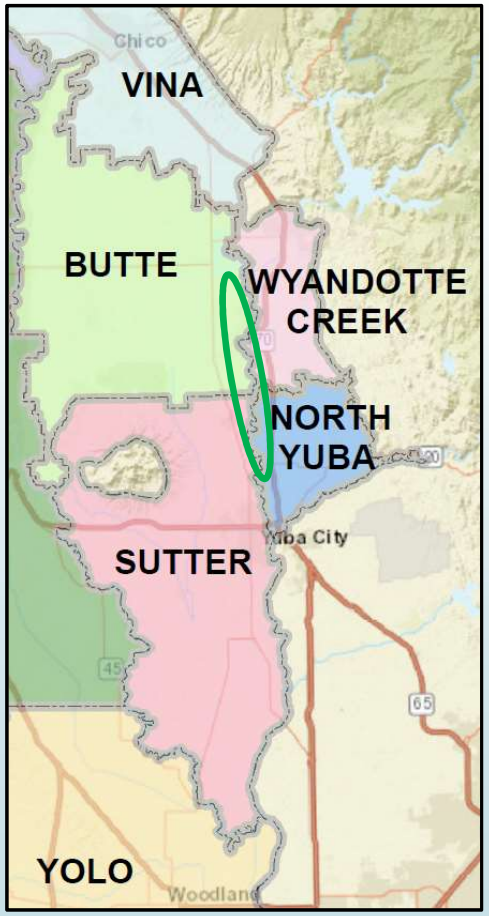
- **Recommendation: Wyandotte Creek Subbasin intends to pursue grant funding and collaboratively work with subbasins in the Feather River Corridor group to**

a. Contract with a consultant to conduct this work

b. Evaluate and compare contents of GSPs with a focus on establishing a common understanding of basin conditions at boundaries

c. Identify significant differences, uncertainties, and potential issues of concern related to groundwater interaction at the boundaries

d. Engage in analysis and evaluation of SMCs between GSPs to assess impacts and identify significant differences and possible impacts between subbasins that could potentially lead to undesirable results

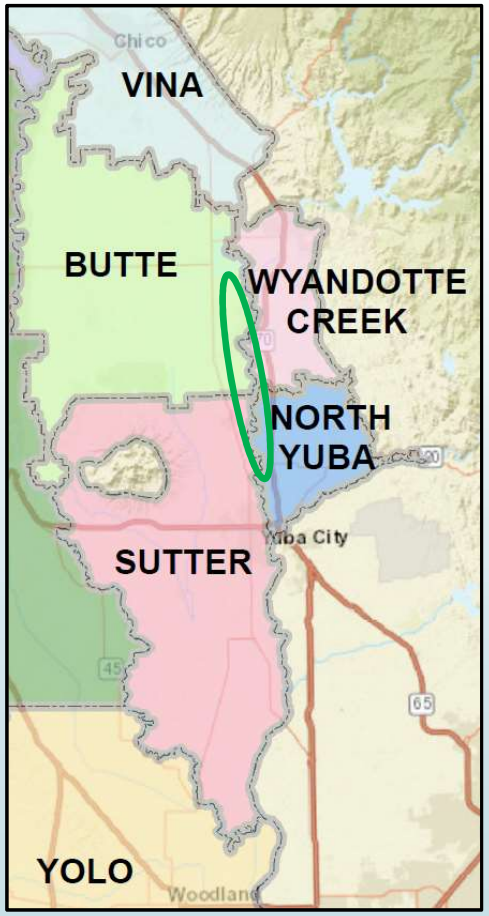


Pillar 3. Coordination on mutually beneficial activities

3. Coordination on mutually beneficial activities a. Communicate, coordinate, and collaborate on mutually beneficial activities, which could include joint monitoring, joint reporting, regional modeling, and other efforts to address data gaps at subbasin boundaries b. Collectively pursue funding and collaborate on mutually agreed upon projects and management actions that provide benefits across boundaries c. Leverage existing collaboratives (NSV IRWM, NCWA etc.)	• Neighbor-to-neighbor • Coordination groups • Regional: NSV IRWM, NCWA Groundwater Task Force	• *Ongoing (GSP Development)* • *Near-term (5-year update)* • *Long-term (GSP implementation).*

Pillar 3. Coordination on mutually beneficial activities

- Recommendation- Work collaboratively with **Feather River Corridor subbasins** to identify items in our GSPs that are ripe for a coordinated project and pursuit of funding:
  - Projects and Management Actions
  - Data Gaps→ new monitoring wells, stream gaging etc.
- Wyandotte Creek will pursue grant funding to support a consultant to conduct this work
- Wyandotte Creek will work collaboratively with the Northern California Water Association (NCWA) and others in their efforts to pursue funding and support local and state agency activities to identify and fill regional data gaps



Pillar 4. Coordinated communication and outreach

4. Coordinated communication and outreach a. Coordinate and collaborate on regional-scale public engagement and communication strategies that promote awareness on groundwater sustainability, enhance public trust, and maintain institutional knowledge b. Maintain list of GSP/subbasin staff contacts and websites	• Regional: NSV IRWM and NCWA Groundwater Task Force	• *Ongoing (GSP Development)* • *Near-term (5-year update)* • *Long-term (GSP implementation)*

- Relevant to subbasins in the Northern Sac Valley, Feather River Corridor group
- Recommendation: Wyandotte Creek GSA staff will continue to participate in regional public engagement activities and efforts related to implementation of SGMA in the Northern Sacramento Valley.

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Pillar 5. Issue-resolution process

5. Issue-resolution process a. Establish and follow an agreed-upon process for identifying and resolving conflicts between GSAs by the first five-year update [Refer to Appendix D for more details and discussion prompts on issue resolution processes]	• Neighbor-to-neighbor • Coordination groups	• *Near-term (5-year update)* • *Long-term (GSP implementation).*

- Defining the steps that would be taken should a conflict arise
- Question: Should this be pursued with
  - Butte?
  - North Yuba?
- Possible Recommendation: Wyandotte Creek Subbasin will pursue development of an issue-resolution process with _____ Subbasin(s)
- Alternative Recommendation: Wyandotte Creek will pursue information sharing and mutually beneficial activities with its neighboring subbasins at this time. Development of an issue-resolution process may be pursued at a future time if warranted.

Pillar 5. Issue-resolution process WAC Perspectives

Option 1: Wyandotte Creek Subbasin will pursue development of an issue-resolution process with the North Yuba and Butte Subbasins.

Option 2: Wyandotte Creek will pursue information sharing and mutually beneficial activities with its neighboring subbasins at this time. Development of an issue-resolution process may be pursued at a future time if warranted.

WAC Input

- A couple WAC members could go either way
- One WAC member thought it is premature and would prefer to wait
- One WAC member expressed the importance of having a plan and being prepared, not for if but when some level of conflict will arise and it's cost and time saving to have a plan in place

Board Recommendation for Option 1 or 2?

Other Discussion or Recommendations?

Wyandotte Creek
GROUNDWATER SUSTAINABILITY AGENCY

Wyandotte Creek GSA Financial Report		**Fund Balance:**	**$ 14,749.85**
FY 2021-2022 (7/1/2021 - 6/30/2022)		**Balance Date:**	**8/13/2021**
Expenditures			
Budget Item	Date	Amount	Notes
Legal			
BKS	7/27/21	$ 420.00	
Total Legal Spent		**$ 420.00**	
Legal Budget		$ 10,000.00	
% of Legal Budget Spent		4%	
Insurance			
Total Insurance Spent		**$ -**	
Insurance Budget		$ 1,789.00	
% of Insurance Budget Spent		0%	
Audit			
Total Audit Spent		$ -	
Audit Budget		$ 2,500.00	
% of Audit Budget Spent		0.00%	
Contingency			
Total Contingency Spent		**$ -**	
Contingency Budget		$ 530.00	
% of Contingency Budget Spent		0%	
Website			
Total Website Spent			
Website Budget		$ 360.00	
% of Website Budget Spent			
All Expenditures		**$ 420.00**	
Total Budget for Expenditures		**$ 15,179.00**	
% of Budget Spent		**3%**	

Revenue			
Budget Item	Date	Amount	Notes
Member Agency Contributions			
Total Member Agency Contributions Received		$ -	
Total Member Agency Contributions Budget		$ 15,000.00	
% of Member Agency Contributions Budget Received		0%	
Interest			
Total Interest Received			
Total Interest Budget		$ 179.00	
% of Interest Budget Received		0%	
Overview			
All Revenue		**$ -**	
Total Budget for Revenue		**$ 15,000.00**	
% of Budget Received		**0%**	

Fund Balance		
Starting Balance 7/1/2021	$	15,169.85
Expenses	$	420.00
Revenue	$	-
Fund Balance 8/13/21	**$**	**14,749.85**

Wyandotte Creek
GROUNDWATER SUSTAINABILITY AGENCY

Jackie Glover

Subject: FW: Public Comment: Sustainable Groundwater Management

From: Tasha Levinson <tdian@sbcglobal.net <mailto:tdian@sbcglobal.net> >
Sent: Tuesday, August 10, 2021 11:25 AM
To: wyandottegsa@gmail.com <mailto:wyandottegsa@gmail.com>
Subject: Public Comment: Sustainable Groundwater Management

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ATTENTION: This message originated from outside Butte County. Please exercise judgment before opening attachments, clicking on links, or replying.
.
Dear Ladies and Gentlemen:

I find myself increasingly concerned about Butte County's and California's water situation:

1. The fires that have raged through our state since 2017 indicate that we have passed a tipping point with climate change AND those fires have burned a substantial portion of the land that receives snow. Thus much of the snowpack region of the watershed has been destroyed in ways that will substantially reduce the historic benefits of snowpack that California has enjoyed.

2. Surface waters have been drawn down to the point that Lake Oroville currently is about 25% capacity (when, historically, it should be at 70-80% of capacity). Whether through evaporation, over-use locally, sales to water contractors in Southern California, etc., matters not: the draw down has been huge.

3. Groundwater now is being depleted by large-diameter wells with huge pumps, to the point that neighboring properties' wells are going dry. These large diameter wells with huge pumps have been permitted even while we were supposed to be figure out a sustainability management plan. I have attended numerous sustainable groundwater meetings: too often it appears to me that the approach has been to set standards so as to avoid state interference RATHER THAN to actually be able to maintain and manage sustainable groundwater levels. If we continue as we appear to be going now, I fear we will have created a bureaucracy but not acted to solve the problem.

I would so like to see us doing better here in Butte County. A line I heard on the news was to the effect that we can no longer plan based on past history, but rather have past the tipping point where we must plan based on our reasonably predicted future. I am sufficiently concerned that I will be sending a copy of this to our Governor. Thank you for your attention.

Tasha Levinson (Oroville Resident)