

Attachment A: Comments and Responses on Administrative Draft Interconnected Surface Water and Groundwater Dependent Ecosystems Workplan: Napa Valley Subbasin (October 30, 2022)

Commenter Organization (if applicable)	Commenter Name	Section/Chapter Number	Page Number	Line Number	Table Number	Figure Number	Comment	Response
Institute for Conservation Advocacy, Research & Education/ICARE	Chris Malan	General	Letter				Stream incision is mentioned but not discussed thoroughly. This is very important to have this discussion in the Work Plans...Add: a.) a discuss about storm water runoff caused by deforestation b) diminished recharge and how this impacts groundwater recharge c) discuss erosion to bed and banks for the streams and Napa River from increased rate of runoff d) what happens to groundwater levels from this incision process? It is vital that the public is informed of this information in the Work Plans or again it is a violation of the Public Trust.	As mentioned in the comment stream incision is discussed in the report, and will be analyzed as part of the relative elevation modeling. A sentence was added to the relative elevation modeling.
Institute for Conservation Advocacy, Research & Education/ICARE	Chris Malan	General					Add critically important streams as ecologically significant: Bear Creek known to have the highest benthic macro-invertebrates know to BMI taxonomy (Bob Wiseman from Aquatics Associates taxonomy).	Bear Creek is discussed in the Bale Slough ecohydrologic conceptual model.
Institute for Conservation Advocacy, Research & Education/ICARE	Chris Malan	General					In all references to benthic macro-invertebrate and steelhead monitoring information by Dr. Charley Dewberry add the Institute for Conservation Advocacy Research and Education/ICARE as the founder and our projects he wrote about. ICARE is an important groundwater stakeholder in Napa County and worthy of being added accordingly, just like the RCD is mentioned over and over again.	ICare was added to the text.
Institute for Conservation Advocacy, Research & Education/ICARE	Chris Malan	General					Consult with Jake Rugyt, as a local native plant expert botanist, and be advised by his recent native plant book printed in 2020: Plants of Napa County California, including a Discussion of other Ecological Relationships. Jake has studied GDE's and their plants for many years and has critical plant data on this, to prevent omissions of important to the Work Plan.	Rugyt will be consulted during implementation of the Workplan.
Institute for Conservation Advocacy, Research & Education/ICARE	Chris Malan	General	Letter				This Work Plan is void of accurate scientific information about stream definitions. The Work Plan characterizes streams as either perennial or intermittent and then wrongly attaches an ecological ranking number (1-10) to the importance of these streams as defined for the purpose of determining the locations of intensive GDE dual monitoring well locations. This is a critical flaw in the Work Plan to protect GDEs because it fails to establish the correct definition of streams and their ecological values accordingly. The Department of Fish and Wildlife and National Marine Fisheries defines streams as 1st, 2nd or 3rd class based on historical hydrologic and scientific information. Because the Work Plans define streams as intermittent or perennial is passing along disinformation about the stream's ecology and importance to the Napa Sub-Basin as GDEs. This incorrect/mis-information about the Napa River watershed makes false information about a stream's ecological value. Example: the Work Plan defines Suscol Creek as an intermittent stream but then maps it as a steelhead migration corridor stream. Because the stream is said to be intermittent, it paints the picture to expect it to be dry and therefore groundwater pumping is less likely to be considered a factor in GDE dewatering. These Work Plans side step the fact that all the class 1streams in the Napa Sub-Basin historically flowed year around even in drought conditions and provided flows for salmon. ICARE has been doing snorkel surveys in the Napa River since 2000 and 2/3rds of the class 1 streams are dewatered by a combination of groundwater pumping and diversions, thereby causing hydrologic modification of fish habitats. All the GDE ranking of streams that the Work Plans has created must redone with the correct terminology based on historical data not current impressions of streams being intermittent because all the intermittent streams identified in this Work Plan are actually Class 1 fish bearing streams that have been hydrologically altered by human impacts of diversions and groundwater pumping. Consultation with National Marine Fisheries Service/NMFS and the Department of Fish and Wildlife/DFW to correct the 'ranking' and definition of streams is needed in order for the Work Plans to properly state how intensive dual monitoring of GDEs locations should proceed.	The perennial and stream usage categorization used in the assessment were maps made by Napa RCD in 2019 based on field assessment by staff biologists over many years. The perennial/intermittent classification was used in conjunction with Stream Watch data and NVIHM modeling results to identify reaches that were likely to be affected by groundwater management. This approach has been clarified in the Workplan. In general, the perennial/intermittent classification based on field observations matches NVIHM modeling results. Of the 10 points available in the prioritization framework, 2 points were based on summer flow conditions (for reaches with flowing conditions or isolated pools during the summer during wet or normal year), to focus on stream reaches where groundwater pumping is likely to have the largest impact on stream flow. Many of the tributaries which are described as intermittent also supported multiple lifestages of salmonids (e.g., passage, spawning, and rearing) and would be categorized as Class 1 streams (which include both perennial and intermittent channels). The biological monitoring sites may be relocated in the future in consultation with the TAG. Both NMFS and CDFW reviewed and commented on the Workplan.
Institute for Conservation Advocacy, Research & Education/ICARE	Chris Malan	General					Discuss freshwater harmful algal blooming/FHABs in GDE, and how low flows and dewatering causes the acceleration of harmful algal blooms which may cause toxic algal blooming to occur imperiling the public and water supplies for Napa.	Currently, we are not aware of any algal blooms occurring. If algal blooms occur in the future, this Workplan will be modified to address them.
Institute for Conservation Advocacy, Research & Education/ICARE	Chris Malan	General					Add the Public Trust Doctrine to the Work Plan resource list.	Napa County policy, as adopted in Resolution 2022-178, establish that the county will consider "... the environment consistent with public trust principles, and all beneficial uses, to ensure prudent water resource management and efficient use, for the benefit of present and future generations." Also documented in Section 2.2.2 of the Workplan.
Institute for Conservation Advocacy, Research & Education/ICARE	Chris Malan	General					Add Outreach and education in Spanish.	The addition of outreach materials in Spanish has been included in Section 7.3.
Institute for Conservation Advocacy, Research & Education/ICARE	Chris Malan	General					Discuss why the Napa GSA is not responsible for including the Napa Sonoma Valley aquifer designation as the Napa Sub-Basin 2-002.01 as delineated the Department of Water Resource's website? The GSA should take responsibility for a GSP and Work Plans in the Napa Sonoma Valley aquifer. Sonoma formed a GSA for this aquifer due to it being a medium designation for groundwater sustainability requiring a GSP. Accordingly, Napa and Sonoma share this aquifer and should be doing GSP shared planning for sustainability since Napa grape growers are using this aquifer for pumping groundwater to vines.	This Workplan specifically focuses on the Napa-Sonoma Valley - Napa Valley Groundwater Basin 2-002.01 aquifer system.
	David Graves	General					The Workplan has many good elements (e.g. more extensive flow monitoring in space and time, more GWSW wells, more biological data collection at "Intensive Sites") However, the TAG as constituted is lacking any members with biological expertise, and the ISW/GDE is narrowly focused on the Subbasin	This comment has been noted. TAG membership is outside the scope of this Workplan.
	David Graves	General					Much previous work has confirmed the inseparable functional linkage between the Napa River mainstem and its tributaries within the Sub-basin and reaches upstream of the Sub-basin. This Workplan does not address the connection.	The Workplan acknowledges that there is extensive spawning and rearing habitat upstream of the Subbasin, some of which is blocked by barriers. A sentence was added to directly state that extensive habitat is located upstream of the Subbasin in Section 3.3.1.2. The NVIHM uses upstream hydrologic conditions as input to the Subbasin and thus the upstream portions of the basin are critical input to the model.

	David Graves	General				The adopted Workplan must include surveys to monitor and protect the important rearing habitat upstream of the Sub-basin. It should make recommendations by which improvements in the upstream flow regime and riparian vegetation can greatly enhance the value of these reaches of the tributaries, using the principles of the California Environmental Flows Framework.	The Workplan focuses on ecological conditions within the Subbasin. The potential benefits of improved upstream conditions could be explored at a later date to assess potential approaches to improving habitat and fish populations. The Workplan, however, focuses on understanding the relationship between stream habitat, flow, and groundwater pumping.
Friends of the Napa River	Sent by David Graves on behalf of the Board of the Friends of Napa River	General	Letter			However, a larger issue in the application of CEFF is unaddressed—how to go from Section A in CEFF (identifying “ecological flow” criteria using “natural functional flows”) to Section B (using “additional information to develop ecological flow criteria given physical and biological constraints”) to the hard work of Section C in the CEFF model: “How do I reconcile ecological flow needs with non-ecological management objectives to create balanced environmental flow recommendations?” In the schematic in Section 2.3 of the Workplan, this crucial step in the application of CEFF is a small orange box of outsized import. In Table 2.1, “Discrete Steps Outlined in CEFF”, Step 8 is ambitious (“Identify Management Objectives”), Step 9 (“Assess Flow Alteration”) requires a great deal of confidence in the brand-new CEFF model’s explanatory power, but it is Steps 10 (“Evaluate management scenarios and assess tradeoffs”) and 11 (“Define Environmental Flow recommendations”) that contain the difficult policy choices that have never been made using CEFF criteria. The scientists who created CEFF acknowledge that the tool will require considerable refinement to be effective in groundwater-dependent river systems. The policy framework of Step C is easy to outline but is much harder to implement successfully. The CEFF standards are yet untested in any real watershed, and making the Napa Sub-basin an early test case should be recognized as a heavy lift. Given that under the SGMA framework, the Sub-basin Groundwater Sustainability Plan must be resubmitted for re-approval in less than three years, the amount of work required in the meantime by the consultants, the County staff, the GSA and stakeholders is considerable.	CEFF Section C is not part of this Workplan but will be implemented after the CEFF Sections A and B analyses are completed in 2024 and 2024. It is very ambitious, but provides a common framework to address these issues and should complement sustainable management criteria for ISW and GDES.
Friends of the Napa River	Sent by David Graves on behalf of the Board of the Friends of Napa River	General	Letter			The California Environmental Flows Framework (CEFF) project will play a central role in the ISW/GDE Workplan; this is one of the first deployments of this ambitious tool in any SGMA-related system. The Napa River is classified in CEFF’s Flow dataset as “Winter Storm” system; the early application of CEFF to such a system, especially where summer baseflow is groundwater-dependent, seems very ambitious. Significant supplementation of summer baseflow from surface storage seems unlikely.	This comment has been noted.
Friends of the Napa River	Sent by David Graves on behalf of the Board of the Friends of Napa River	General	Letter			The inclusion of the Longfin Smelt in the Workplan’s analysis seems misplaced, given its occurrence is estuarine	Longfin smelt were listed as Threatened under the California Endangered Species Act in 2009 (they were listed as a Species of Special Concern in the 2008 Napa County General Plan). Because they are sensitive to freshwater inputs, Rohde et al., (2019) include longfin smelt as a groundwater dependent species. Longfin smelt were detected at Station 349 (near the Riverside Drive Boat Ramp) as part of the smelt larval survey of the Interagency Ecologic Program (IEP) (Merz et al., 2013, Lewis et al. 2019, IEP, 2024). This station is located at the southern end of the Subbasin, in the tidal section of the Napa River.
Friends of the Napa River	Sent by David Graves on behalf of the Board of the Friends of Napa River	General	Letter			The scope and cost of the data collection and analysis effort for the ISW/GDE Workplan deserves to be more thoroughly laid out, especially as much of the survey work will be very detailed on the specified reaches.	The scope and cost of the surveys are currently being determined and will be finalized in the coming months. Detailed costs will be determined following a reconnaissance site visit after Workplan adoption to assess site access and extent.
Friends of the Napa River	Sent by David Graves on behalf of the Board of the Friends of Napa River	General	Letter			This Workplan seems to treat the Sub-basin as a separate entity from the Watershed as a whole, when the many populations of the aquatic species it identifies as important use the tributaries as spawning and rearing habitat after migrating through the Subbasin. (Curiously, in some instances, the Workplan explicitly recognizes this connection, for example in Figure 3-14 of the ISW/GDE Workplan.)	The Workplan is designed to address data gaps in the GSP related to ISW and GDES, and the GSP plan area is the Subbasin. The habitat type map (Figure 3-14 in the October 2023 draft) identifies migration corridors on the Napa mainstem and tributaries that connect to tributary reaches outside of the Subbasin. Migration corridors were included in the ecological importance component of site prioritization and in the ecological targets for the ecohydrologic conceptual models.
Friends of the Napa River	Sent by David Graves on behalf of the Board of the Friends of Napa River	General	Letter			The existing considerable body of literature regarding the biota of the Watershed as a whole is not adequately acknowledged in the Workplan, some of it developed by the same consultant, Stillwater Sciences, in 2002 in their “Napa River Basin Limiting Factors Analysis, prepared for the San Francisco Bay Water Quality Control Board”.	This Workplan focuses on groundwater dependent ecosystems and interconnected surface water in the Subbasin rather than the watershed as a whole, with a particular focus on better understanding linkage between groundwater, stream flow, and biological response.
GSM	Gary Margadant	General	Letter			Missing or incomplete data on springs and stream gages in the Mayacamas Range, draining into Dry Creek or Pickle/Redwood Creek. Data that is not useful for this study since it is located outside the basin.	This comment has been noted.
UC Davis	Graham Fogg	5	69		5-1	I assume the highlight colors should be either green, blue or pink, but only see green on the figure. What is happening at the non-green times? If there are not enough data to show the ‘isolated pools’ or ‘dry’ designations, I suggest saying so in the caption.	Edited the legend to remove Stream Watch classifications with zero observations for this site.
UC Davis	Graham Fogg	3.3.2.1	45		3-15	The Napa River is designated in this figure as ‘perennial,’ yet for the last, approx. 23 years it has not been perennial (Fig. 3-8). I also presume that a number of the other stream courses in this figure are also no longer ‘perennial.’ Since I assume a major goal is to restore these streams to their formerly perennial status, I strongly recommend the map be modernized by correctly showing the intermittent and perennial streams.	The data that this map was produced with was created by the Napa County RCD in 2019 based on observed stream conditions. In the updated draft the stream type is more clearly labeled. Groundwater connectivity and the effects of groundwater pumping will be explored during this study and additional data will be gathered at the dual-completion wells and expanded Stream Watch sites.
UC Davis	Graham Fogg	3.4	54	1264-1265		Given that the Napa River has transitioned from perennial to intermittent, it is critically important to identify where the losses to groundwater are greatest so that the river can be restored to its formerly perennial status. In that context, it is not credible to me that this bullet represents the only data gap along the Napa River in the study area. In fact, the GSP, Fig. 6-123a shows enormous gaps in the near-stream groundwater level data needed to determine where the river is losing. Similar gaps are illustrated in Fig. 6-6 of the Groundwater Sustainability Annual Report 2022. It is bewildering to me why already available maps such as those were not used to more comprehensively identify data gaps concerning groundwater and surface water interaction along the Napa River.	The bullet for the Napa River at Calistoga was moved to the previous paragraph because the list addressed tributaries that both supported salmonid rearing and spawning and lacked either a shallow well or stream watch site. Note that dual-completion wells were installed at eight new sites in 2023, including three sites on the mainstem Napa River (Deer Park Road, Lodi Lane, and Regatta Way). In addition the new dual completion well at Bale Slough is very close to the Napa River. Text was added to describe the data gap between the Napa River at Pope Street and the Stream Watch site for the Napa River at Rutherford.

UC Davis	Graham Fogg	5	70	1494-1495		Under "Known and Likely Stressors", it is odd that groundwater pumping is not plainly stated to be such a 'stressor.' The statement "The reduced groundwater levels may impact aquatic areas and wetlands dependent on groundwater. is obtuse and should be preplaced with more direct text. The other portions of section 5 describing "Known and Likely Stressors" should also be reviewed for clarity and completeness.	Groundwater pumping was added to this section. The previous paragraph had discussed the modeled impacts of groundwater pumping on surface flows.
UC Davis	Graham Fogg	3.1.4	21	830-833	3-8	This statement summarizing Fig. 3-8 seems to omit the obvious and important point: the distinct, post-2000 trend of more no-flow conditions. It is noteworthy and important that after 2000 the Napa River transitioned to a stream that is no longer perennial.	Text has been modified to read, "Figure 3-8 shows that the number of days with flow less than 0.1 cfs increased starting in the early 2000's, with days with less than 0.1 cfs occurring even during wet years at the two gage sites, when they were previously limited to dryer years (i.e., the 1976—1977 drought). "
UC Davis	Graham Fogg	3.1.4	24	870-871		I know that this language ("...disconnected losing reaches are not hydraulically connected to groundwater") is commonly used, but I have learned firsthand how confusing it is to laypersons because such losing reaches are neither 'disconnected' hydrologically nor are they 'not hydraulically connected'. The previous sentence is enough, and I suggest you delete this last sentence.	The sentence was deleted.
CDFW	Jessie Maxfield	6.2.2.2	92	1940		Why aren't "Fall Flush Flows" included? These flows are important to initiate Chinook migration into the system.	Fall flush flows have been added to the text.
CDFW	Jessie Maxfield	3.3.1.2	38	1080-1083		While there may be data suggesting that steelhead can occur at higher temperatures, they need to be able to find thermal refugia in cooler waters and their health can decline if they are subjected to warmer temperatures (usually associated with lower Dissolved Oxygen) over a long period of time. While this one study may suggest otherwise, there is an overwhelming amount of existing research that indicates salmonids thrive in cooler water temperatures. Groundwater contributions often play a key role in maintaining these cooler water temperatures in pools where over-summer rearing is occurring.	Added text, "This study does not imply that cooler temperatures are not beneficial, but instead simply suggests that steelhead can persist at temperatures that exceed published temperature tolerance. "
CDFW	Jessie Maxfield	5	68	1460-1465		Both Kimball Reservoir (managed by the City of Calistoga) and Rector Reservoir (managed by CalVet) are implementing environmental flow release strategies that could/should be shared with Napa County to help inform the degree of influence of these dams. CDFW has been coordinating with these two agencies re. the development of these flow release strategies and could help facilitate coordination with the GSA.	This comment has been noted. Environmental flow release strategies would be very useful to incorporate. Stillwater is working on the Rector flow recommendations, but we were unaware of Kimball.
CDFW	Jessie Maxfield	6.5	103	2188-2191		What is the planned process for the GSA to present data to the stakeholders to solicit input on not only refining SMCS but refining the implementation actions? If changes need to be made to the GSP implementation based on monitoring results, what is the process/timeframe for adapting any implementation plan actions? Waiting for 5 year updates could result in missed opportunities.	Data will be included in the annual reports with more frequent presentations to stakeholders through TAG meetings. Additional presentations will be given to other stakeholders potentially including Napa WICC, the Farm Bureau, and environmental stakeholders.
CDFW	Jessie Maxfield	3.2.5	30	986-987		Other methods/equipment should be used to measure low flow scenarios (HOBO Loggers/Riffle-Crest-Thalweg (RCT) measurements). In locations that are known to go dry or have extremely low flow, Wet/Dry mapping is another technique that can be used to evaluate drying patterns and give a better understanding of when and where pools are being disconnected. CDFW and NMFs could help provide additional information re. Wet/Dry Mapping and RCT monitoring methods.	Wet dry mapping (referred to as connectivity mapping in the Workplan) is included in the site-specific surveys and is qualitatively determined at Stream Watch sites.
CDFW	Jessie Maxfield	3.2.6	32	992-995		Dissolved Oxygen should be one of the water quality parameters that is being monitored.	Dissolved oxygen has been added to the water quality parameters.
CDFW	Jessie Maxfield		67		Figure 4-2. Proposed Intensive Monitoring Sites	4 of the 6 sites already have a good amount of hydrologic data available. York Creek is known to have SH and a dam was recently removed. This might be a better site to prioritize for intensive monitoring. The tributaries in general are where over-summer rearing will be occurring and Sulpher Creek is the only tributary identified in the Proposed Intensive Monitoring Sites.	The recommended intensive sites have been modified. We removed The Napa River at Napa because groundwater has little effect on the biologic conditions there and there are few surveys that would occur there (no amphibians, very little plants, difficult fish surveys, etc.). Instead we propose adding Bale Slough, an ongoing restoration project. We considered York Creek, but chose Bale Slough because York Creek and Sulphur Creek (the other tributary site) are very close together. CDFW will continue to conduct longfin smelt surveys near the reach.
TAG	Julie Chambon	ES	ES-1	181		suggest to clarify the Workplan is designed to provide a plan for collecting data and performing evaluations to address the data gaps related to ISW and GDEs.	Added to ES paragraph on ISW/GDE data gaps.
TAG	Julie Chambon	ES	ES-6	421		inconsistency in dates for surveys between text (2025, 2026) and Table ES-1 (2024 and 2025)	Updated text.
TAG	Julie Chambon	3.2.1		941		add that "stream stage will also be monitored at these eight sites (Section 3.2.5)".	Monitoring of stream stage clarified.
TAG	Julie Chambon	3.2.5		988		it looks like the eight SWGW sites are not shown on Figure 3-11 (at least Napa County 247d/248s appear to be missing) suggest adding with a note in the legend (stage measurement to be implemented in XX?)	Eight new SWGW sites are included. Note that previous Figure 3-11 is now Figure 3-10.
TAG	Julie Chambon	3.3.2.1		1185		issue with Table 3-3 reference	Edit made.
TAG	Julie Chambon	4.3		1415		should it be "eight of the 21 sites had...?"	Edit made.
TAG	Julie Chambon	5		1513		assuming stream stage is also available since 2014 at this location based on information in Sections 3.2.1 and 3.2.5, this information should be added here and also on Figure 5-2	Added stage to SWGW timeseries plots, where applicable.
TAG	Julie Chambon			1594		same as above	Added stage to SWGW timeseries plots, where applicable.
TAG	Julie Chambon	6.1.1.1		1805		suggest replacing monitoring by "continuous monitoring using transducers"	Added to text. Data downloads are occurring on a quarterly basis.
TAG	Julie Chambon	6.1.1.1		1809		indicate at which frequency the transducer data will be downloaded and at which frequency manual gauging will be performed.	Added to text. Data downloads are occurring on a quarterly basis.
TAG	Julie Chambon	6.1.1.5		1849		space missing after occur	Edit made.
TAG	Julie Chambon	6.1.1.5		1858		clarify where the updates to NOVHM will be documented; in the annual TM? Or in other reports?	Specified that NOVHM updates are included in the Annual Reports.
TAG	Julie Chambon	6.1.2.2		1874		suggest indicating that this will be done in coordination and/or with inputs from the NCGSA	Text added, "in coordination with NCGSA".
TAG	Julie Chambon	6.2.1		1893		clarify that flow connectivity will be mapped annually (Table 6-4) at least four times...	Added: "Flow connectivity will be mapped at least four times annually, starting and spring and continuing through the dry season".
TAG	Julie Chambon	6.2.3.3		2013		add when the baseline assessment is anticipated to be performed (2024?) and how would the recommendation be made (in annual TR?)	Modified text to include 2024 as the baseline assessment year.
TAG	Julie Chambon	6.2.6.1		2093		change can to will? (this workplan should describe what will be implemented as part of this work)	Edit made.
TAG	Julie Chambon	6.3.1		2140		suggest adding "and documented in XXX [maybe 5-year update in 2026?]"	Documentation of data has been updated throughout the Workplan.
TAG	Julie Chambon	6.3.1		2142		suggest adding "and documented in XXX"	Documentation of data has been updated throughout the Workplan.
TAG	Julie Chambon	6.4		2171		inconsistency in dates for surveys between text (2025, 2026) and Table 6-4 (2024 and 2025)	Updated text.
TAG	Julie Chambon	6.5		2183		suggest to either change reporting to 2031 (to include surveys to be conducted in 2030) or conduct surveys in 2029 to be included in 2030 reporting	Reporting will be done in 2031.
TAG	Julie Chambon	3.1.4			3-6, 3-7, and 3-8	add note on figures for when St Helena gage station was relocated	Note added to figures.
TAG	Julie Chambon	3.1.4			3-5	add date range for stream gage locations (former Location XX to XX)	Added relocation timing info to following paragraph.

TAG	Julie Chambon	4.2			4-1	for sites that have SWGW monitoring installed in 2024, add SWGW in column "surface water monitoring" to indicate that stream stage is also monitored (consistent with info in Sections 3.2.1 and 3.2.5)	Added stage (2015-Present) for 2014 SWGW sites.
TAG	Julie Chambon	4.2			4-1	for sites that have SWGW monitoring installed in 2023, indicate that stream stage monitoring will also be implemented in column "surface water monitoring" (consistent with info in Section 3.2.5).	Added stage (planned 2024) for 2023 SWGW sites.
TAG	Julie Chambon	6				Suggest starting this section with the list of monitoring and evaluation, as well as Table 6-4 to clearly outline what is proposed	Added summary table 6-X and reworded some of Section 6 intro
TAG	Julie Chambon	6.1.1				monitoring of stream gage (including at the 13 SWGW/ISW sites) is missing from the list	Added surface water monitoring to 6.1.1.
TAG	Julie Chambon	5				An overview table summarizing the main features of the CSM at the six sites would be very useful	Added Table 5-X to Section 5 intro.
TAG	Julie Chambon	ES	ES-11		ES-1	For steps under Section B, suggest updating the Schedule/Notes column to indicate that those steps will be completed after Workplan adoption and refined/updated during Workplan implementation as additional data is collected	Added to schedule/notes column for Section B.
TAG	Julie Chambon	4.3			4-3	highlight the six selected sites so that they can be identified relative to all 21 sites	Added to Table 4-3.
TAG	Julie Chambon	ES	ES-6		ES-2	consider performing the third survey in 2029 instead of 2030 so that data can be evaluated and included in the 2030 5-year update TR	Reporting will be done in 2031.
TAG	Julie Chambon	3.3			3-12, 3-13, 3-14, 3-15	not possible to see perennial vs. intermittent stream on this figure - maybe use thicker lines so that it can be seen below the other color lines	Changed symbology on all figures.
TAG	Julie Chambon	4.3			4-1	highlight the six selected sites so that they can be located relative to all 21 sites	Changed symbology to highlight intensive monitoring sites.
TAG	Julie Chambon	4.3			4-2	add stream watch and SWGW locations to the figure	Not included to avoid repetition of Section 3 figures.
TAG	Julie Chambon	3.2.2			3-10	suggest adding USGS gage stations	Figure 3-10 and Figure 3-11 have been merged to provide all the necessary data in a single figure.
TAG	Julie Chambon	3.2.5			3-10 and 3-11	it is challenging to understand the monitoring network - it may be better to create one 11*17 figure with two panels (north and south portions of the basin) and show all information currently shown on 3-10 and 3-11.	Higher resolution figures were produced and placed within the Workplan.
TAG	Julie Chambon	6.1.1.4		1841-1842		extensive monitoring performed by which organizations?	Added references to Napa River Flood Protection project vegetation monitoring and added "Monitoring for three restoration projects on the mainstem Napa River, conducted or coordinated by Napa County RCD and/or Napa County Flood Control and Water Conservation District, is described below."
TAG	Julie Chambon	ES	ES-4	246-248		issue with text	Edit made.
Napa RCD	Martin Perales	6	91	1911		Double check if 3 pass snorkel surveys are a thing. Delete '3 pass' if its not a common surveying method.	Expanded discussion of survey method and added a reference.
Napa RCD	Martin Perales	5	81-83	1676-1721		I am not sure there is much to learn about the potential effects of groundwater pumping on GDE's at the Napa at Napa site since the river is tidal. Fish surveys done here during the summer will likely yield an estuarine fish assemblage, which I suspect is going to be more affected by the water year type than GW pumping. I would strongly consider a different site, even if it feels redundant with other sites. Its difficult to say which other sites need monitoring. Plenty of ag near the Dry creek site, and redwood is a known anchor steelhead watershed, so there might be something to learn at that site, although there isn't much ag. Might serve as an interesting contrast since pumping might be limited due to the urban foot print. Not sure, this needs more thought.	Agreed, this site was removed from the prioritization list due to the ecological score being too high.
Napa RCD	Martin Perales	3	20	811-817	3-7	It is challenging to see details in figure 3-7 that illustrate variability in the recession curves. One could recreate the figure using the following as inspiration? https://scx2.b-cdn.net/gfx/news/2023/record-heat-in-early-j-jpg	This comment has been noted. The figure has not been updated but a more thorough analysis of the recession flows will be conducted during the implementation.
Napa RCD	Martin Perales	3	21-22	830-834	3-8	Hmm, "These data illustrate the historical occurrence of seasonal low-flow conditions" from line 830-831 might be an under interpretation of figure 3-8. One could add total annual rainfall for the water year as a barchart to the top of the figure (maybe like this figure? - https://www.researchgate.net/publication/323346678/figure/fig4/AS:596995970461699@1519346339213/Time-series-of-daily-precipitation-and-streamflow-a-and-precipitation-and-runoff.png) so the reader can see if the general relationship between annual rainfall and the 'Days with Less than 0.1 cfs Flow' has changed. This figure is powerful and illustrates that conditions in the watershed are dramatically changing (climate change? pumping? Combination? Other things?)	Figure has been updated to include annual precipitation.
Napa RCD	Martin Perales	3	24	875-878		Results from hydrologic modeling suggest the hydraulic connections between surface water and groundwater are dynamic and vary spatially and temporally' from line 877-878 seems to warrant some type of visualization. I know I would love to see how gw/sw connection changes through time and space. If this map exists already, could think about including it or calling out where it is in other plans. Without seeing the data, its hard to know how to summarize it, but there is some good inspiration in the following paper: Moidu, H., M. Obedzinski, S. M. Carlson, and T. E. Grantham. 2021. Spatial Patterns and Sensitivity of Intermittent Stream Drying to Climate Variability. Water Resources Research 57:e2021WR030314.	This comment has been noted. Additional figures to visualize groundwater-surface water connectivity were not developed for the Workplan, but will be developed during implementation.
Napa RCD	Martin Perales	3	25	896-897		Could add that baseflows are lowered as a result of altered channel network. See figure 10, pg 45 of Napa River Watershed Profile: https://www.sfei.org/documents/napa-river-watershed-profile-past-and-present-characteristics-implications-future-manageme	Added note to Section 3.1.5.
Napa RCD	Martin Perales	General				The intensive site data collection offers good depth and temporal coverage, once we have a few years of data, but poor breadth. Because groundwater pumping potentially affects large areas, it might be fitting to have a lower effort monitoring approach at a broader spatial scale. Perhaps tracking the spatial extent of perennial rearing habitat changes from year to year within the subbasin might serve as an appropriately sensitive and relatively easy ecological indicator to track. This can be done with expanded wet-dry mapping (maybe with a drone) to find perennial reaches and fish surveys conducted at peak dry conditions to confirm if areas are rearing habitat. These efforts could be justified given that the workplan aims to understand O. mykiss rearing in the watershed (line 470, 'Workplan describes the steps needed to understand conditions necessary to 1) maintain steelhead spawning, rearing, and migration in the watershed;...',) and there exist many questions regarding steelhead rearing conditions within the subbasin. This is a non-trivial task but perhaps the gold standard for tracking impacts of pumping on natural resources given that steelhead have well defined habitat requirements, and are sensitive compared to frogs, trees, etc.	An expanded wet-dry mapping has been added to the Workplan, with the method of measurement to be determined (walking versus drone). The methods of the wet-dry mapping can be revised once the expanded Stream Watch sites have been determined.
Napa RCD	Martin Perales	4	67		4-2	Missing legend info - update to show what the pink dots are.	Figure and legend have been updated.

Napa RCD	Martin Perales	3	19, 23			3-5, 3-9	Could probably combine some maps or make maps with little information smaller. I think having many full page figures with little information impacts the readability of the document. Not much info in 3-5 and 3-9.	Removed Figure 3-9.
Napa RCD	Martin Perales	5	70, 73, 77, etc		5-1, 5-2, 5-2, etc.		It took me a while to figure out that some of the info necessary to interpret these tables is on lines 973-978. Even after reading that and the footnote, I don't think I understand the tables. 'Streamflow (cfs)' is the simulated streamflow without pumping. 'Stream Depletion (cfs)' is the simulated amount lost to groundwater, correct? Not sure that is correct since why is there loss to pumping during the winter months (unless this is loss due to channelization, tile drainage, etc. but then that's adding to the stream...?). Either way, more guidance on interpreting these tables is sorely needed. Beef up the current foot note, and add footnotes to explain what the other columns are. These tables should be able to stand alone. This might not be enough clarification, but you could add the following text from line 977: 'The difference in simulated streamflow in the synthetic model relative to the calibrated model is a measure of the stream depletion.' as a foot note for the 'Stream Depletion (cfs)' column.	Additional footnotes have been added to each of the tables to explain the streamflow, stream depletion, and why stream depletion occurs in winter months.
TAG	Matt Kondolf	3.3.1.2	38	1072			Minor point of clarification: Text refers to "winter steelhead". Is this a subset of "steelhead in the Napa River and its tributaries" or would the entire population be considered "winter steelhead"?	Text changed to "steelhead".
TAG	Matt Kondolf	3.3.2.1	48	1188			Perhaps a brief explanation of how "interconnected surface water ecosystems" would differ from the GDEs listed here. And of course "water" is a unique "GDE" but I think that is fine, as it would certainly be a mappable unit.	Added text "does not include interconnected surface water that makes up the Napa River and its tributaries)" to Table 3-3.
TAG	Matt Kondolf	3.3.2.1	55	1303			For clarification, I suggest "...the mainstem Napa remains connected later in the year..."	Edit made.
TAG	Matt Kondolf	3.3.2.1	55	1310			"The perennial tributary reaches..."	Edit made.
TAG	Matt Kondolf	3.3.2.1	55	1312			"...is important for migration of salmonids and other..."	Edit made.
TAG	Matt Kondolf	3.3.2.1	72	1524	Napa R at Pope St		Delete "during" or otherwise revise text.	Text clarified.
TAG	Matt Kondolf	3.3.2.1	59				Both Deer Park and Jefferson St would seem priorities for surface water monitoring (of stage) given the investment in shallow groundwater wells.	Additional text has been included to detail the surface water monitoring planned in 2024, including at the new SWGW wells.
TAG	Matt Kondolf	3.3.2.1	59				Entry for "Napa R nr Calistoga" – why was the site "retired" in 2022?	Added footnote explaining that the site was retired because it was always flowing.
TAG	Matt Kondolf	3.1.4	20				The first sentence indicates that surface water monitoring began at both USGS gage sites in Oct 1929, and the second sentence that "stream stage is monitored continuously at these gages..." This implies that both gages began in WY 1930 and have been measuring continuously since. However, the station manuscript page for the USGS gage near Napa (11458000) indicates that the gage operated only from Oct 1929-Sept 1932, then was discontinued until its operation was restored in Oct 1959 (to present). This gap is reflected in Figure 3-6, which shows blue bars (for Napa gage) only for WY 1930-1932, then again starting WY 1960. Likewise, the St Helena gage operated WY 1930-1932, then was restarted in Oct 1939. The station manuscript page for this gage (11456000) indicates it then operated "...October 1939 to June 1995 (daily), July 1995 to May 2000 (stage only), June 2000 to current year. Monthly discharge only for some periods...". The gap in record from Sept 1932 to Oct 1939 is also reflected in Figure 3-6, which shows no yellow bars during this time period. I'm not sure how to interpret the notation "stage only" for 1995-2000 as a gage like this would continuously record stage only, and apply a rating curve (based on discharge measurements made monthly and also during high flows as feasible) to convert stage values into discharge values. Perhaps it means that no discharge measurements were conducted during this time, so converting to discharge would have to be done using older rating curves. The station manuscript page has this notation indicating that the site of the gaging station was moved at the beginning of WY 2005: "Oct. 1, 1929, to Sept. 30, 2004, at site 2.2 miles downstream at datum 25.09 ft lower." This section of the Plan would probably be a good place to describe the former site of the USGS gage and the fact that the gage was moved to its current location (when and why). The gage locations pre- and post-Oct 2004 could have different surface-groundwater interactions and thus any interpretation of changes in the record of low flows recorded by gage 11456000 should take into account the different gage site beginning WY2005. I recommend revising the text to clarify that the Napa gages were not recording continuously since Oct 1929, and highlight the change in location of the St Helena gage.	Added table with data availability and expanded text.
TAG	Matt Kondolf	3.3.2.1	59				Napa R nr St Helena. Under Sfc water monitoring, instead of simply "USGS", say "USGS gage" for clarity and consistency with Oak Knoll entry.	Edit made.
TAG	Matt Kondolf	General Comment on CEFF					From reading the document, I don't feel that I have a good understanding of the CEFF and how it is applied to the Napa sites (i.e. how specifically one implements this method). However, I expect that future reports will include more details on the process, and examples of how the CEFF has been applied here. I will meantime read through the CEFF documentation in more detail with these detailed study sites in mind.	This comment has been noted.
TAG	Matt Kondolf	3.3.2.1	91				Flow Connectivity study Over what lengths will we map flow connectivity? Text specifies the 1.5-mi reach of Napa R near Calistoga. Will others be comparably long, or if shorter is there some minimum length, such as 20 channel widths? Reference to access permitting implies concern about walking out these lengths of creek, but theoretically	Flow connectivity was recommended to measure over bankfull 20 widths, access permitting.
TAG	Matt Kondolf	3.2.3	29				As I've noted in TAG meetings, this is a great program, which provides very useful data and merits further expansion. I think a couple of the sites may not have made it onto the map, as I see only 33 red triangles within the subbasin (plus 4 just outside).	Newell Creek and Murpby Creek sites are outside the mapping area--added note to text.
TAG	Matt Kondolf						Overall this is an excellent document. Nice job! It's comprehensive, thoughtful, generally well-written, and it strikes me as a solid approach to addressing surface-groundwater interactions and GDEs. I've made a number of mostly minor comments, some technical, some editorial. I am still unclear on exactly how the CEFF is applied. This is a limitation in my knowledge of the CEFF and not a reflection on the Workplan. I will consult the documentation for CEFF to understand better how this analysis is applied to streams generally to better understand its application to the Napa subbasin, and how "non-flow" alterations are taken into account in the development of the CEFF flow metrics.	This comment has been noted and additional discussion and background on CEFF has been added throughout the Workplan.

TAG	Matt Kondolf	3.3.2.1	58		Table 4-1	<p>Entry for "Napa River at Napa" shares the name with the USGS gage, but I see the USGS gage is listed under "Oak Knoll Road" so this is another site, downstream more in the city itself. Maybe list it here under a different name (e.g. First St?) to reduce potential confusion.</p> <p>I would think this site would be a high priority to install some surface water monitoring to take advantage of the ongoing shallow well measurements. Or perhaps there is a reason why the site is not suitable? That would merit a word of explanation. See also Deer Park and Jefferson below.</p>	The Napa River at Napa site is being replaced by Bale Slough based on several comments.
TAG	Matt Kondolf	3.2.5	30			<p>Text lists the two USGS gages, Oak Knoll Ave and Pope Street, "both of which monitor stage and discharge." Perhaps too fine a point, but as noted above, the gages measure stage continuously, discharge only occasionally to build a rating curve, then calculate discharge by applying the rating curve to the continuous record of stage.</p> <p>Text states that the County maintains 5 transducers to record stage adjacent to SWGW sites, the Flood Control District maintains "the rest of the sites". And that in total 8 sites monitor stage and discharge, 16 monitor stage only. I interpret this to mean that at all 16 sites, stage is measured continuously, but at only half of these sites discharge measurements are made to develop a rating curve with which a continuous record of stage can be converted to a continuous record of flow. Is that the correct interpretation? If so, it might be best to revise the text to clarify this, or to explain the situation if another interpretation is correct. As we have at least three agencies involved in measuring stream stage, stream flow, and adjacent groundwater levels, it might be helpful to clearly indicate which surface water stations are operated by whom (and since when), which include periodic flow measurements to build a rating curve, and with what streamside groundwater wells (how frequently measured and operated by whom) these surface water stations are paired. E.g., how do the 5 transducers and the 16 sites monitoring stage relate to the 13 dual completion wells? The statement about the limited utility of the gages operated by the Flood Control District for low flows and thus for some of the surface-groundwater flow calculations seems very relevant. Perhaps a brief explanation of the current limitations and how these gages could be improved for low-flow accuracy. Overall, the text could be improved by clearly describing in a logical order the surface and GW measurement points and how they relate.</p> <p>A broader comment about the surface flow measurement network: Especially given some sites apparently don't have a program of discharge measurements to yield a rating curve, can we consider installing flumes on some sites? I expect a key limitation would be fish passage, and I don't know well enough if a parshall flume is simply a "no-go" for passage or if fish might be able to pass if correctly designed. But if there are measurement sites upstream of anadromy, it might be worth exploring the feasibility technically and from a permitting perspective. Flumes are nice in that they can provide more accurate flow data than using a rating curve in a natural channel, and once installed only require maintenance (e.g., clearing debris) but no further measurement.</p>	The text has been updated to provide additional detail about the monitoring sites.
TAG	Matt Kondolf	3.2.1	26			<p>"Dual completion wells" The second sentence in this section may be confusing to some readers, in that it refers to "five shallow dual-completion monitoring well (SWGW) sites (10 wells total)." "SWGW" is defined (on pg. vi) as "surface water groundwater", so implies monitoring of surface water elevations in addition to groundwater, but the wells would be measuring groundwater only.</p> <p>My impression is that the term "dual completion well" is more commonly used in the energy sector, and is used for wells that produce from two different formations at different depths. It may be that I am not up to speed with the terminology, my last geology degree being over 40 years ago, but we might want to consider using a different term for these wells, perhaps "nested piezometers", if that is in fact what is being referred to in the text, as that might be more widely understood. Nested piezometers would seem to meet the definition in the text of separately monitoring GW conditions in shallow and deep aquifers and enabling measurement of vertical hydraulic gradients. However, the mention of "10 wells total" implies that these are not truly nested piezometers but pairs of nearby wells, one screened at greater depth than the other.</p> <p>The temporal and spatial distribution of these wells could be clarified also.</p> <p>The section begins by predicting that the monitoring network will include 13 dual completion wells (for a total of 26 wells) by the end of 2023, then says "within the ISW monitoring network there are five shallow dual completion monitoring wells..." Are the other eight dual-completion wells not considered part of the ISW monitoring network? The last sentence of the section says "An additional eight SWGW sites (16 new wells) were installed in 2023." Perhaps the section can be reorganized to report the wells in chronological order (simpler for a reader to follow) and to clarify if the 2023 wells are considered part of the ISW monitoring network, which I assume they would be.</p> <p>Table 3-1 lists Dual Completion Monitoring Well Sites, and lists "surface water-groundwater monitoring well". I assume the well is not monitoring surface water, but the text doesn't say how the surface water is monitored, e.g., pressure transducer and data logger, recording at 4-h intervals, located in the stream adjacent to the monitoring well. In any event, I suggest the section be rewritten to clarify these potentially confusing points.</p> <p>And a minor point, but the first sentence could be updated to reflect that we are in 2024 now and the wells are (I believe) already installed.</p>	The terminology of "dual-completion monitoring wells" as well as "SWGW wells" is consistent with the Napa GSP and Annual Reports. The dual-completion monitoring wells are completed at two different elevations and monitor different areas of the groundwater system. Clarifying text has been added concerning the monitoring of surface water stage in relation to the dual-completion monitoring wells has been added in Section 3.2.1.
TAG	Matt Kondolf	3.3.2.1	55	1301-1302 and 1306-1307		These are repetitive. One sentence/clause can be deleted	Edit made, second sentence has been deleted.
TAG	Matt Kondolf	3.3.2.1	55	1309-1310		Confusing. Normally we speak of changes to the river/stream in a downstream direction, so drainage area would not "decline". If this is meant to refer to changes as one moves upstream, rewrite to make that clear.	Text updated.
TAG	Matt Kondolf	3.3.2.1	72	1531-1532	Napa R at Pope St	Are the dams and in-channel diversions accounted for in the NVIHM?	Yes. The NVIHM includes dam releases as well as in-channel diversions, as long as the diversions are reported to the SWRCB.
TAG	Matt Kondolf	3.3.2.1	78	1639-1640		Very minor point: the drainage area would be increased here simply because of the topography, having nothing to do with the presence of upstream reservoirs.	Text clarified.
TAG	Matt Kondolf	3.3.2.1	81	1689-1690		Unclear. If Hennessey and Rector Dams "block 24 percent of drainage area" then how does SFEI report 30 percent of drainage area to be "upstream of dams". Clarify	Text clarified.
TAG	Matt Kondolf	3.3.2.1	86	1762, 1766-67		Clarify whether the channel is still incised or if it has aggraded to its historical elevation (historical elevation as indicated by what evidence?)	Text revised to clarify that the incision is mostly in the downstream reaches while aggradation was mostly upstream (near the site).

TAG	Matt Kondolf	3.3.2.1	92	1915-1916		Something missing. Suggest: "...sites will be analyzed using 2 D hydraulic modeling..." Section 6.3 Application to CEFF	Edit made.
TAG	Matt Kondolf	3.3.2.1	98	2113-2115		Text now reads "...all functional flow components are unaffected by non-flow factors". Should this read "affected"? (implied by lines 2146-2147). If not, I may be misunderstanding how the CEFF works and how non-flow factors are assessed.	Text updated to "may be affected by non-flow factors".
TAG	Matt Kondolf	2.3	8	627-629		I would expect in most California rivers and stream that "non-flow" alterations affect many flow components.	Agreed. Added ", which occur to some degree in many rivers in California." to the end of the sentence.
Winegrowers of Napa County	Michelle Benvenuto	3.5	56	1323		The sentence stating that three special-status fish species are supported by the Subbasin appears inaccurate, particularly in the context of the longfin smelt. As previously noted, "[l]ittle information exists for their specific use and phenological timing of freshwater movements." (page 41). Hence, the longfin smelt do not appear to be supported by the Subbasin	Longfin smelt were listed as Threatened under the California Endangered Species Act in 2009 (they were listed as a Species of Special Concern in the 2008 Napa County General Plan). Because they are sensitive to freshwater inputs, Rohde et al., (2019) include longfin smelt as a groundwater dependent species. Longfin smelt were detected at Station 349 (near the Riverside Drive Boat Ramp) as part of the smelt larval survey of the Interagency Ecologic Program (IEP) (Merz et al., 2013, Lewis et al. 2019, IEP, 2024). This station is located at the southern end of the Subbasin, in the tidal section of the Napa River.
Winegrowers of Napa County	Michelle Benvenuto	General/Cost considerations				Has the financing for the monitoring and implementation plans been taken into account? It's essential to clarify whether there's an assumption of an unlimited budget or if the existing plans represent a balanced approach between acquiring reliable data and managing costs effectively. Providing transparency on the financial considerations will contribute to a better understanding of the feasibility and sustainability of the proposed plans.	The scope and cost of the surveys are currently being determined and will be finalized in the coming months. Detailed costs will be determined following a reconnaissance site visit after Workplan adoption to assess site access and extent.
Winegrowers of Napa County	Michelle Benvenuto	3.3.1.3	41		3-2	There appears to be an inconsistency regarding the occurrence of Longfin smelt in the Napa Valley Subbasin. While the table lists them as likely present with known occurrences, earlier text contradicts this by stating there are no specific occurrences (1109). The mention that observed Longfin smelt may have been captured downstream or outside the Subbasin adds to the uncertainty (1112-1113). Additionally, the table's statement that "recent evidence suggests" the use of freshwater lacks citation and indicates a need for further study. The use of the term "suggests" indicates an ongoing level of uncertainty. Given the absence of occurrences within the Subbasin, it cannot be conclusively stated that Longfin smelt rely on or serve as a good indicator for the health of the Subbasin or a Groundwater Dependent Ecosystem (GDE) within the Subbasin.	The text has been updated to fix this misunderstanding.
Winegrowers of Napa County	Michelle Benvenuto	3.3	32	1001-1002		"The analyses assume that all surface water in the Subbasin is connected to groundwater at least some of the time. The data in this section was used to develop the monitoring workplan outlined in Section 6." This assumption is substantial and significantly influences the development of the monitoring plan. It is imperative to thoroughly assess and validate this assumption to ensure the accuracy and effectiveness of the monitoring strategy.	Added the following to the first paragraph of Section 3.3: ".The analyses assume that all surface water in the Subbasin is <i>potentially</i> connected to groundwater at least some of the time. This assumption is explored further for intensive monitoring sites in Section 5 and is based on NVIHM, shallow groundwater monitoring, Stream Watch, and stream stage and discharge data."
Winegrowers of Napa County	Michelle Benvenuto	3.3.1.1	34	1019-1025		This definition of special status species is different than that in the Napa County General Plan (Napa County General Plan 2008, page G-6) and its EIR (DEIR page 4.5-11). The term is not apparently defined in the GSP. (Definition not in section 1.1.2 general definitions or in section 5.5.9 and 5.11 descriptions of monitoring network.) A specific concern is raised regarding the clarity and objectivity of the process for a species to be "under review" or "proposed" for Endangered status. To maintain consistency, a request is made to align with the definition provided in the Napa County General Plan.	A footnote was added to Section 1.1 that briefly defines special status species and refers to the Napa County General Plan and points to Section 3.3 for specific description of special-status species.
Winegrowers of Napa County	Michelle Benvenuto	3.3.1.2	39	1099-1113		It appears longfin smelt is an estuary species (https://wildlife.ca.gov/Conservation/Fishes/Longfin-Smelt) that has not been present in Subbasin historically. The species is described as an inhabitant of "the Delta and elsewhere in the open waters of San Francisco Estuary" (Moyle 2015 https://deeply.thenewhumanitarian.org/water/community/2015/09/08/last-days-of-the-longfin) Is it a goal of the ISW workplan to bring longfin smelt into the Subbasin?	Longfin smelt were listed as Threatened under the California Endangered Species Act in 2009 (they were listed as a Species of Special Concern in the 2008 Napa County General Plan). Because they are sensitive to freshwater inputs, Rohde et al., (2019) include longfin smelt as a groundwater dependent species. Longfin smelt were detected at Station 349 (near the Riverside Drive Boat Ramp) as part of the smelt larval survey of the Interagency Ecologic Program (IEP) (Merz et al., 2013, Lewis et al. 2019, IEP, 2024). This station is located at the southern end of the Subbasin, in the tidal section of the Napa River.
Winegrowers of Napa County	Michelle Benvenuto	3.3.1.2	39	1103, 1111		Notes that smelt have been observed in fresh water, but based on later text (1111), it would seem no specific occurrences have been observed in the Napa Valley Subbasin.	The text has been corrected to note that longfin smelt have been observed in the southern portion of the basin.
Winegrowers of Napa County	Michelle Benvenuto	5	68	1460-1461		Why is the influence from upvalley dam releases not explored? Dam releases could impact GDEs, and dam operators keep data on water releases. Ignoring releases from Kimball, Bell, Hennessey, Rector, and Milliken seems almost like ignoring rainfall. Like upstream barriers to fish movement, these non-groundwater circumstances impact the Subbasin. If monitoring only includes groundwater, you cannot determine whether other factors are involved.	Releases from the reservoirs are included in the integrated hydrological model and are considered as part of the analysis. The text has been revised to reflect this.
Winegrowers of Napa County	Michelle Benvenuto	ES-3	ES-6	266-267		The statement "The analyses assume that all surface water in the Subbasin is connected to groundwater at least some of the time" raises questions, as there is no supporting data confirming the connection of ALL surface water in the subbasin to groundwater at any given time. In fact, available data seems to contradict this assumption. It is advisable to reevaluate this approach, taking into account the existing data that suggests variations in the connection between surface water and groundwater. Alternatively, a clear justification for maintaining this assumption should be provided.	Text has been added to clarify that this assumption will be evaluated as part of the Workplan.
Winegrowers of Napa County	Michelle Benvenuto	ES-4	ES-7	303-305		Concerns have been raised at public meetings regarding the perception that sites were chosen based solely on the availability of historical data. However, it appears that historical sites might have been selected for their ecological value. It's important for stakeholders to be reassured that, in line with the statement on line 1780, intensive monitoring sites were chosen for both their high ecological value and the presence of sufficient hydrologic data to assess biological requirements. Ensuring transparency about the criteria for site selection is crucial for instilling confidence in the chosen locations, emphasizing that they were not selected solely due to the availability of historical data.	Added the "presence of special-status species" to the beginning of this statement.

Winegrowers of Napa County	Michelle Benvenuto	2.1	5	547-548		The language could imply that the location of barriers upstream of the Subbasin means these barriers have no effect on steelhead migration and spawning. Is that correct? If these barriers have an effect, monitoring the presence and effect of those barriers is important to gauge the success of increasing Subbasin groundwater levels towards the goal of maintaining steelhead migration and spawning.	The barriers do not affect access to spawning and rearing reaches within the subbasin, but impact fish populations in the Napa River system. The bullet has been updated to include the Napa RCD's barrier removal plan and now reads "Barriers to fish passage limit the extent of steelhead habitat in the watershed. Most of the current barriers are upstream of the Subbasin. The Napa County RCD is implementing a barrier removal plan to improve passage to upper reaches of the watershed (Napa County RCD, 2011)."
Winegrowers of Napa County	Michelle Benvenuto	3.1.3	17	772-774		As with the GPR workplan, it's essential to note that rural residential constitute 18% of groundwater usage, with a significant portion, 90%, dedicated to outdoor landscape irrigation. When applying these percentages to the pumping figures illustrated in Figure 3-4, it becomes evident that residential landscape irrigation, a non-agricultural use, consumes four times more water than winery usage, emphasizing the substantial impact of residential irrigation on groundwater resources compared to the water demand from wineries.	This comment has been noted. The amount and distribution of pumping is outside the scope of this Workplan.
Winegrowers of Napa County	Michelle Benvenuto	3.1.4	21	828-830	3-8	Fig 3-8 is unclear regarding the specific duration during which the gauges measured less than 0.1 cubic feet. Please provide a clarification or specify the exact number of years covered by the data in question.	Figure 3-8 has been modified to show zero flow days from 1960 through 2022 to avoid confusion on data availability. In addition, Table 3-X includes when USGS gages were operated.
Winegrowers of Napa County	Michelle Benvenuto	3.1.4	24	852-853		It's important to acknowledge the inherent difficulty in quantifying groundwater-surface water interactions. Despite this challenge, the success of the workplan hinges on precisely this metric and applicants in the permitting process are tasked with addressing and quantifying these interactions.	This comment has been noted.
Napa Valley Vintners	Michelle Novi	General				The adoption of the California Environmental Flows Framework within the Interconnected Surface Water and Groundwater Dependent Ecosystems Workplan (ISW) marks a significant milestone and paradigm shift in overall water management in California.	This comment has been noted.
Napa Valley Vintners	Michelle Novi	General				As noted by the 2018 Brisbane Declaration and Global Action Agenda on Environmental Flows, "Implementation of environmental flows requires a complementary suite of policy, legislative, regulatory, financial, scientific, and cultural measures to ensure effective delivery and beneficial outcomes." (Arthington, Bhaduri, et al. 2018)	These factors are considered in CEFF Section C and are not addressed in this Workplan or associated implementation.
Napa Valley Vintners	Michelle Novi	General				Within the ISW, the implementation process, including key decision making mechanisms is unclear. More clarity is needed. The implementation of the CEFF in Napa Valley, let alone throughout the state, will be incredibly challenging because it will involve "balancing complex trade-offs between supporting freshwater ecosystem function through environmental flows while not disrupting societal water needs."	We have added a section making clear how decisions will be made in terms of future studies and recommendations about changes to the study plan (Section 6.6). CEFF Section C will of course be challenging, but the goal is to have a common framework and quantification of environmental water needs. Note that Section C will be implemented after the Workplan.
Napa RCD	Miguel Garcia	1.1	2	493		Extra space	Edit made.
Napa RCD	Miguel Garcia	3.3.2.1	44	1185		Reference missing	Edit made.
Napa RCD	Miguel Garcia	5	73	1542		Extra parenthesis	Edit made.
Napa RCD	Miguel Garcia	6.1.1.5	90	1849		Typo	Edit made.
Napa RCD	Miguel Garcia	6.1.1.5	90	1854		Typo	Edit made.
Napa RCD	Paul Blank	6	89	1836		RCD intends to continue operation of the rotary screw trap in its current location indefinitely if funding can be secured; however, due to significant downtime in recent years from extreme high and low flows, we may supplement the smolt monitoring program in the future with additional methods and/or locations.	Text has been updated to reflect this comment and cited Paul Blank.
Napa RCD	Paul Blank	5	81			I agree with Martin's comment that the tidal site Napa River near First St may be of limited usefulness. There are many options on tributaries that scored 7 in the prioritization, however, most are on alluvial fans and that may be pretty well covered by the Sulphur Cr site, although the Bale Slough site located near a wetland area is pretty unique. Another option might be an additional mainstem site between Calistoga and St Helena, maybe in the vicinity of the Ritchey or Nash Cr confluences. This reach may not be well represented by the Calistoga or St Helena sites.	The Napa at Napa site has been demoted and Bale Slough has risen to the top of the list.
UCCE, Napa	Qicheng Tang	ES	ES-2	200		Should O.mykiss be italicized?	Yes, edit made.
UCCE, Napa	Qicheng Tang	6.1.1.5	90	1846		Should be NVIHM	Edit made.
UCCE, Napa	Qicheng Tang	7.3	105	2231		Should UCCE also be mentioned here?	Added UCCE to Section 7.3.
UCCE, Napa	Qicheng Tang	ES	ES-1	168-170		The sentence is a bit too long, maybe "... to prevent undesirable results within 20 years from GSP adoption?"	This language is directly from the GSP, and thus was left as-is.
UCCE, Napa	Qicheng Tang	ES	ES-2	196-197		This feels a bit confusing. Biological data isn't directly fed into the model, right? Might just saying "data-driven models and process-based models..."	Added text, "hydrologic modeling of groundwater levels and ISW".
UCCE, Napa	Qicheng Tang	ES-1	ES-2	221-224		I suggest making changes to enhance readability. Perhaps "It will encompass existing data collection routines and also expand data collection efforts at the highest-priority monitoring sites"	Edited sentence for clarity.
UCCE, Napa	Qicheng Tang	ES-2	ES-4	237-246		A general comment: may highlight the benefit of adopting the CEFF framework helps compare Napa across other GSP regions.	CEFF will be useful for comparisons across watersheds once it is more broadly implemented. At present, CEFF has not been implemented extensively.
UCCE, Napa	Qicheng Tang	ES-3	ES-6	274-276		Feels redundant in mentioning Chinook salmon twice.	Edited sentence for clarity.
UCCE, Napa	Qicheng Tang	ES-4	ES-7	308-318		This is an interesting approach to score sites. I am wondering what is the literature background for this approach (i.e., how has this been done by people before)?	The CEFF technical guidance recommends selecting locations of interest (the equivalent to intensive sites) that include a monitoring station (i.e., flow gage), infrastructure feature, or zone of ecological sensitivity. (Environmental Flows Working Group 2022). The ecological importance criteria was developed based on input from the TAG (i.e., the potential for groundwater pumping to affect the site).
UCCE, Napa	Qicheng Tang	ES-5.1	ES-9	345-346		If streamwatch measures flowing conditions then it is not "qualitative" monitoring (should be quantitative monitoring). "Qualitative" is more on the stream chemical part.	Changed to "qualitative observations" instead of "qualitative monitoring" for clarity. See description of Stream Watch in Section 3. Observations classify instream flow conditions into flowing, isolated pools, and dry, but do not quantify discharge.
UCCE, Napa	Qicheng Tang	3.1.3	14	711-712		Feel a little confused here - should vertical groundwater difference channels more groundwater flow under gravitational gradient?	Text changed to "These differences arise due to a difference in the resistance to vertical groundwater flow between unconfined and semi-confined areas. "
NOAA Fisheries	Rick Rogers	ES-3	ES-6	269		Reference to 29.8 miles of salmonid spawning habitat. Is this computed from critical habitat? NCRCD analysis? Please explain.	Reference added (Napa RCD 2016).
NOAA Fisheries	Rick Rogers		21	823		Not sure "typically" correctly captures the frequency of historical channel drying, since it only occurred during "below normal" years (i.e., less often than interconnected conditions). At least that's how I would interpret the observation from Faye.	Added text, "in dry years".
NOAA Fisheries	Rick Rogers	3.1.4	24	872		Since this is a document supporting GSP implementation, I suggest discussing the SGMA definition of interconnected surface water, acknowledging that a continuous saturated zone between SW and GW "at any point" indicates ISW.	Added a paragraph to the introduction that defines interconnected surface water and groundwater dependent ecosystems.

NOAA Fisheries	Rick Rogers	3.2.3	29	949			Is the data reported by Stream Watch ever QA/QC'd? Are these local landowners that report data? Perhaps an explanation on what "Stream Watch" is would be helpful. There is a footnote listed, but no corresponding explanation.	Data from Stream Watch include photographs of the site, which allow for the data to be QC'ed. Currently, Stream Watch data is not QC'ed. A description of Stream Watch has been added to the text.
NOAA Fisheries	Rick Rogers	3.2.5	30	986			Recording and tracking low flows is critical to understanding streamflow depletion impacts on instream habitat quality and steelhead survival. Recommend the appropriate upgrades noted be implemented.	Upgrading the Napa County Flood Control and Water Conservation District stream monitoring sites is not currently feasible. Conversations are ongoing about how to increase environmental low flow monitoring.
NOAA Fisheries	Rick Rogers	3.4	54	1252			Temp/DO data is very important, given the impact mechanism by which flow flows and disconnection impacts steelhead survival. Recommend adequate coverage of this type of monitoring.	Temperature and DO monitoring is included in the intensive monitoring sites. Based on this comment and others, continuous DO measurements will occur rather than periodic DO.
NOAA Fisheries	Rick Rogers	3.5	55	1307			Reference? Is this referring to tributaries outside the basin going dry, or tributary reaches overlying alluvial fans on the valley floor? More clarity would be helpful.	Reference added and the text was updated to clarify that it is within the Subbasin (i.e., on the valley floor).
NOAA Fisheries	Rick Rogers	4.2	60	1382			Could the premature drying of these alluvial fan tributary sections be a bottleneck for smolt outmigration survival (and juvenile relocation from spring to summer habitat)?	Modeling suggests that tributaries are not drying prematurely due to pumping, but the drying of the tributaries could certainly be a bottleneck. The text was updated to clarify this point.
NOAA Fisheries	Rick Rogers	6	88	1790			Significant concern with "maintain" being used here. Data/modeling presented earlier suggests significant streamflow depletion is occurring throughout the basin due to groundwater pumping. I suspect that level of depletion is impacting beneficial uses of surface water and ESA-listed steelhead. "Maintaining" those conditions will not comply with SGMA or the ESA, and therefore is not an appropriate ecological management goal. SGMA requires steady progress toward avoiding all undesirable results by 2042, not maintaining current impact levels.	Language has been modified to be consistent with the GSP. In general, the Workplan will have reference to "protect and enhance" instead of "maintain".
NOAA Fisheries	Rick Rogers	6.2.2.2	92	1940			Document states "Flows would include winter baseflow, spring recession, and dry season baseflows." Was there consideration give to including "fall flush flows" and their benefit to triggering Fall Chinook migration?	Fall peaks have been included and will be assessed in Section A and Section B, if necessary.
NOAA Fisheries	Rick Rogers		23			3-9	Doesn't appear to be any purple (i.e., wetlands) on the map.... Is there supposed to be?	Removed Figure 3-9.
NOAA Fisheries	Rick Rogers		92			6-1	Please note where these criteria were derived from.	The criteria have been adjusted and literature cited.
UCD	Sarah Yarnell	ES-4	ES-7	320			Why not Bale Slough? Only 1 point off and seems a good location reflecting western side of the valley? I'm not familiar with the local sites though.	Bale slough has been added to replace the Napa River at Napa.
UCD	Sarah Yarnell	ES-5.1	ES-9	359			Maybe. I've tried this and shallow water can be as warm as the air temps making it hard to determine exactly when a location went dry. You can generally determine when it gets shallow and warm though.	Sentence deleted.
UCD	Sarah Yarnell	ES-7	ES-13	434			It'd be great to have updates provided to the Environmental Flows Workgroup (part of CWQMC).	California environmental flows workgroup added to list in Executive summary and main body.
UCD	Sarah Yarnell	2.3	8	622			Suggest - "CEFF provides natural functional flow metrics using statewide statistical models...but functional flow metrics may also be calculated..."	Text updated to read "CEFF normally quantifies functional flow provides natural functional flow metrics using statewide statistical models (Grantham et al., 2022; CEPWG, 2021a), but functional flow metrics may also be calculated from a locally calibrated hydrologic model such as the Napa Valley Integrated Hydrologic Model".
UCD	Sarah Yarnell	3.1.3	15	759			It would be nice to see a summary plot of groundwater levels through time, fluctuating with wetter and drier years, to visually support these paragraphs.	A link to the NCGSA interactive web map was added to Section 3.1.3 to view and explore hydrographs.
UCD	Sarah Yarnell	6.2.2.2	92	1940			Is there a need to look at 'floodplain' (inset, natural, or otherwise) inundation during high flow events for additional rearing habitat for salmonids? This is often a key habitat assessment for other rivers.	Changed text to say "floodplain refugia during high flows can also be important for salmonid survival, however, this habitat is not related to groundwater management. Nonetheless, the extent of floodplain habitat at each site can be assessed using the relative elevation model and other fish monitoring assessments. "
UCD	Sarah Yarnell	6.3	98	2114			all functional flow components are affected? dry season baseflow may not be affected by incision. I suggest if an analysis of channel incision effects hasn't been fully completed, then change this wording to 'may be' or 'likely are' affected.	Text changed to "all functional flow components may be affected by non-flow factors".
UCD	Sarah Yarnell	6.3	98	2118			In CEFF groundwater pumping is a 'flow factor', similar to dams and diversions. If the groundwater pumping wasn't occurring, then the natural functional flow metrics would be appropriate as the ecological flow criteria. Channel incision changes the morphology-flow relationships, so natural ranges of high flows may not inundate the floodplain (for example). So it's a non-flow factor that needs to be considered in addition to flow/water. Other non-flow landscape changes could include urbanization, levees, deforestation, etc.	Updated non-flow factor language based on conversation with S. Yarnell.
UCD	Sarah Yarnell	6.3	98	2120			Not quite sure what this sentence means. Happy to discuss what we meant by 'flow factors' versus 'non-flow factors'. This would be helpful for us also to understand how we can clarify in the CEFF technical report.	Sentence was unnecessary and deleted.
UCD	Sarah Yarnell	6.3.1	100	2144			In some of the case studies, we've included a table that summarizes how each landscape change, such as channel incision or urbanization, may affect each of the flow components. This provides support for why Section A flow criteria may not be applicable and there's a need to move into Section B. In most of the case studies so far, only several (not all) of the flow components may need further evaluation.	This comment has been noted and included in text.
UCD	Sarah Yarnell	6.3.1	100	2147			Suggest supporting with a more detailed summary table. This could be a point of disagreement among stakeholders.	The non-flow factors section has been revised based on conversations with S. Yarnell.
UCD	Sarah Yarnell	6.3.1	100	2151			Technically, any functional flow component that is considered affected by non-flow factors, and thus needs further assessment beyond section A, would need this type of conceptual model outlining the analysis within section B. The LA River has nice examples of this.	The non-flow factors section has been revised based on conversations with S. Yarnell.
UCD	Sarah Yarnell	6.3	99			6-3	If there's not time to further justify this decision before finalization of the workplan, then suggest that this be completed as part of the work in 2024. (ie. All flow components have non-limiting factors)	Changed text to "to be completed after Workplan adoption".
UCD	Sarah Yarnell	6.3	99			6-3	Suggest "likely have, and thus will be evaluated further in section B." (ie. All flow components have non-limiting factors)	Text refined.
UCD	Sarah Yarnell	ES-5.3	ES-11			ES-1	Is this explained in one of the subsequent sections? ("All flow components have non-flow limiting factors")	The non-flow factors section has been revised based on conversations with S. Yarnell.