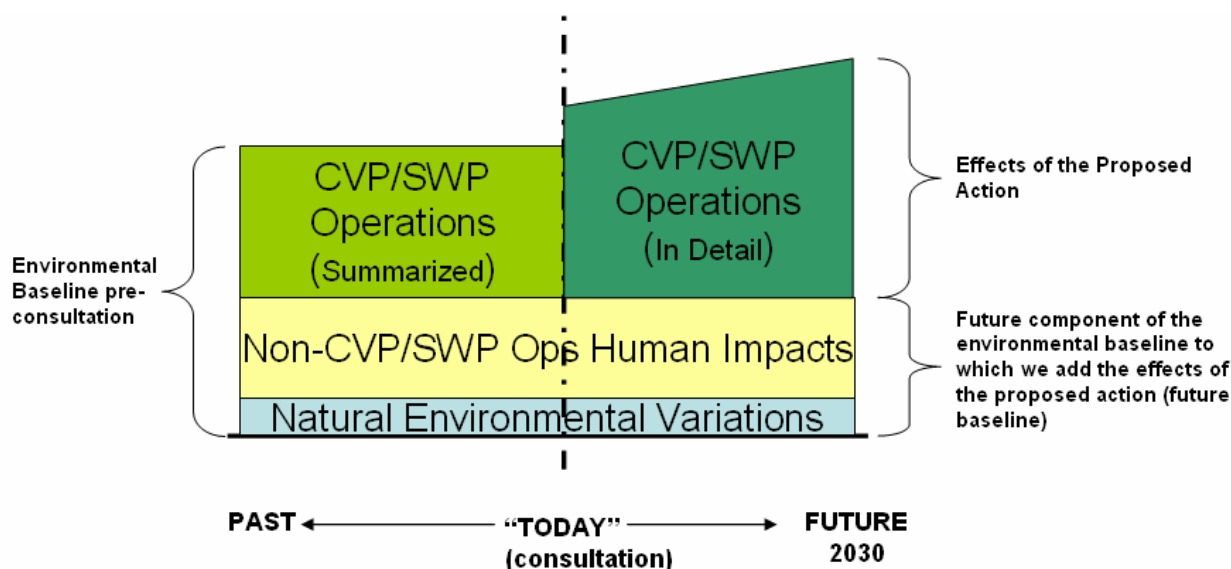


scenario was not run. For example, table 2-1 in the CVP/SWP operations BA identifies the major proposed operational actions for consultation, including implementation of the water quality control plan (WQCP), but it is not clear whether implementing the WQCP, or some portion of it, is a non-discretionary action.

Consequently, we determined that if NMFS were to propose a “no project operations” scenario to characterize the environmental baseline, it would be speculative and not supported by the model runs. Following the 9<sup>th</sup> Circuit’s reasoning, with limited exceptions, NMFS assumed that all CVP and SWP operations are subject to the discretion of the project agencies and, thus, that all effects of future operations are effects of the proposed action. The only project effects considered to be within the future baseline (and thus not effects of the proposed action) are those caused by activities that are clearly outside the agencies’ authority. For example, as in *National Wildlife Federation*, it is not within the agencies’ discretion to remove dams, so the effects of their existence are part of the baseline. Figure 2-12 provides a conceptual diagram of how NMFS characterizes the past and future components of the environmental baseline for consultations on an ongoing action.



**Figure 2-12. Conceptual diagram of how the environmental baseline changes in this NMFS Opinion. The right side of the figure depicts the effects of the proposed action added on top of the baseline into the future (future baseline). Note that the slopes of the curves are only for graphical representation.**

In this Opinion, we analyze the entire suite of operational effects, based on the project description and modeled studies. With this approach, we capture as “effects of the action,” both the effects of operations that are proposed to continue in the future as they have in the past, and any new effects that result from proposed changes in operation. We then add these effects to the future baseline, in which we have captured anticipated effects of non-project processes and activities.

The analytical approach NMFS used is not different from that which USFWS used in its Delta smelt Opinion (USFWS 2008a). There may be a perceived difference due to the presentation of

the material in the biological opinions. In the Delta smelt Opinion, the USFWS provided a more thorough analysis of the past and present effects of ongoing CVP/SWP operations in its Environmental Baseline section (figure 2-13). In the Effects of the Action section, the USFWS summarized the effects from ongoing CVP/SWP operations, then provided a detailed analysis of the effects resulting from the proposed changes in CVP/SWP operations. In NMFS' Opinion, NMFS summarizes in the Environmental Baseline section the past and present impacts leading to the current status of the species in the action area, including the effects of CVP/SWP operations in the past. Also in the Environmental Baseline section, NMFS sets the stage for the analysis of effects of the action by describing the future non-project stressors to which the listed species and their critical habitats will be exposed. In the Effects of the Action section of the Opinion, NMFS provides a detailed analysis of predicted effects of CVP/SWP operations between the time the biological opinion is issued and December 31, 2030. This difference in presentation is of no consequence to the outcomes of the consultations, since both agencies made their ultimate determinations by (1) finding that proposed operations cause additional harm to listed species, and (2) aggregating all future stressors, as regulations and case law require.

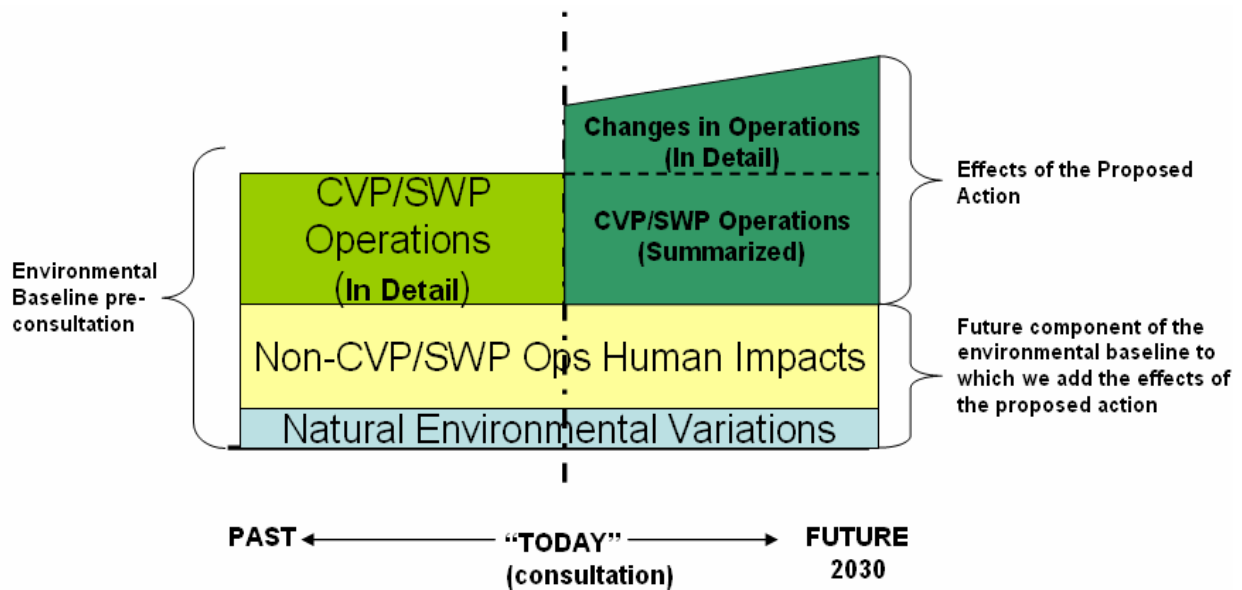


Figure 2-13. USFWS' Delta smelt Opinion baseline: A conceptual model of the effects of the proposed action added on top of the baseline into the future (future baseline). Note that the slopes of the curves are only for graphical representation.

Both Services conduct a separate analysis to determine whether the “effects of the action” reduce either the likelihood of survival and recovery of the species, or the value of critical habitat for the conservation of the species, after the effects of the proposed action have been determined. The Delta smelt opinion states:

*In accordance with the implementing regulations for section 7 and Service policy, the jeopardy determination is made in the following manner: The effects of the proposed Federal action are evaluated in the context of the aggregate effects of all factors that have contributed to the delta smelt's current status and, for non-Federal activities in the action area, those actions likely to affect the delta smelt in the future, to determine if*

California WaterFix Biological Opinion

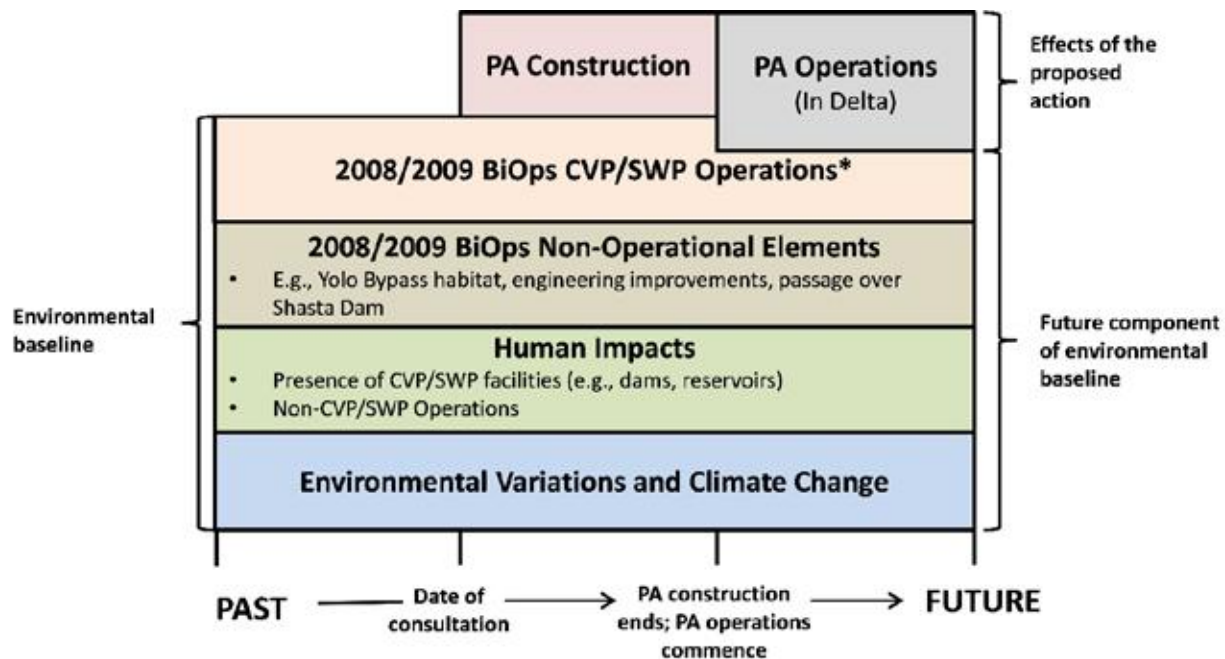


Figure 2-8. A Conceptual Model of the Effects of the Proposed Action Added on Top of the Future Component of the Environmental Baseline.

Note:

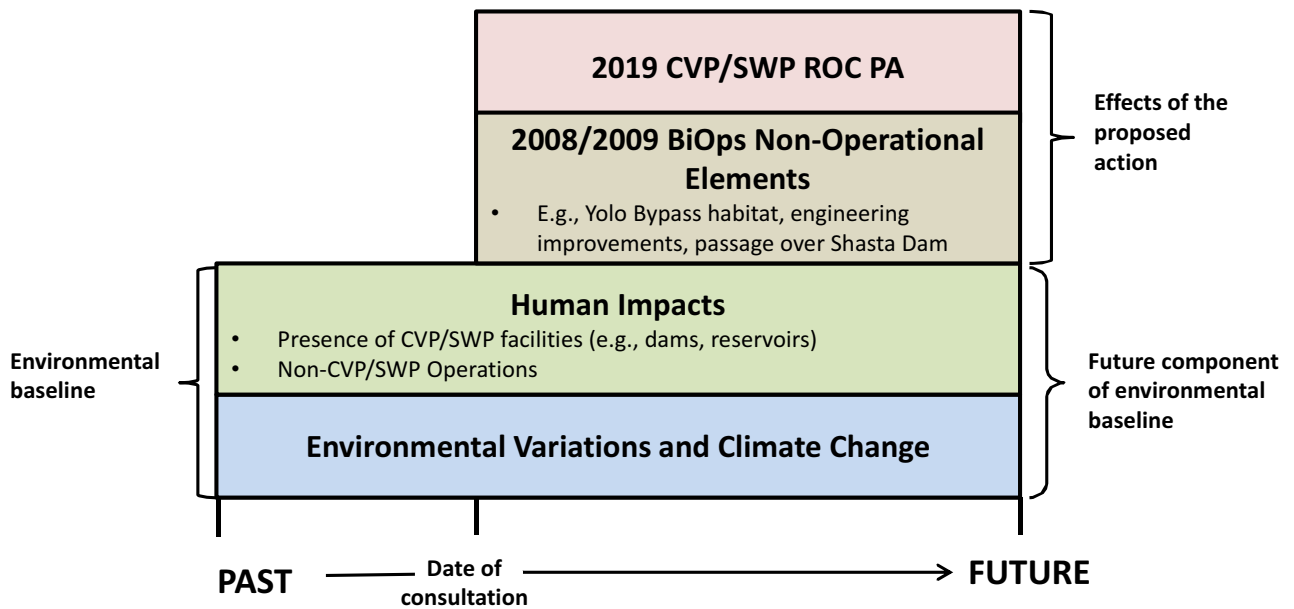
Asterisk (\*) denotes that after PA operations commence, the 2008/2009 biological opinions on Central Valley Project and State Water Project operations will govern all upstream operations and any Delta operations not included in the proposed action operations.

To consider the effects of the action in the context of environmental baseline conditions, the analysis considers future effects of Federal projects that have undergone consultation and of contemporaneous State and private actions, as well as future changes due to natural processes, along with the effects of the proposed project. Given the timeline of the PA and because it includes an ongoing action (i.e., the future ongoing delivery of water), we analyze the entire suite of project effects (both construction- and operations-related) along with environmental baseline conditions in the future, which captures anticipated effects of non-project processes and activities. As presented in the project description of the BA, the PA includes Delta operations of the CVP and SWP in the future after construction of the new north Delta intakes. These future operations include modifications to some operations outlined in the 2008 USFWS and 2009 NMFS biological opinions on the CVP and SWP (i.e., CVP and SWP operations in the Delta); however, not all CVP and SWP operations are included in the CWF PA (i.e., CVP and SWP operations outside of the Delta). The facilities and operations included and not included in the PA are identified in Section 1. Specifically, upstream operational criteria of CVP and SWP facilities at Trinity, Shasta/Keswick, Folsom, Oroville, New Melones, and Friant reservoirs are not included in the PA, and effects of operations of these facilities are considered part of the environmental baseline for this analysis to the extent those effects occur in the action area. Therefore, Figure 2-8 illustrates that the integrated analysis of effects of the PA in the future will include effects of operations governed by a combination of components of the 2009 NMFS biological opinion and the biological opinions issued by NMFS for this PA.

## NMFS 2017 CWF BiOp Revised for ROC PA Without Action

Revisions to Characterize “Without Action” Baseline as identified in 2019 ROC PA.

Figure blocks are illustrative of general categories of components of aggregation of effects in the analysis. Figure does not denote relative intensity of effect or whether impacts are positive or negative; temporal variability of effect/impact is not depicted.



## NMFS 2017 CWF BiOp Revised for NMFS Approach to ROC Consultation

Revisions to Characterize NMFS' Approach for Consultation on 2019 ROC PA.

Figure blocks are illustrative of general categories of components of aggregation of effects in the analysis. Figure does not denote relative intensity of effect or whether impacts are positive or negative; temporal variability of effect/impact is not depicted.

