

threatened status is not to determine whether or why a species will become extinct in the near future, but if, pursuant to section 3(19) of the Act, it “* * * is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range”. An endangered species, pursuant to section 3(19) of the Act, is that “* * * which is in danger of extinction throughout all or a significant portion of its range * * *”.

As stated above, analytical techniques do not exist to determine the rate of splittail population decline with current splittail data. Again, the absence of survey methodologies specifically designed to monitor splittail populations is a limiting factor in determining rate of decline. An estimate of splittail population decline, in the form of an exponential decay model, was included by in our August 17, 2001, notice (66 FR 43145) but was not used in this document because of respondents’ concerns that it is insufficient to describe the interactions in a complex aquatic ecosystem. Further our exponential decay model relied upon the results of the CDFG Mann-Whitney U test results. The CDFG Mann-Whitney U test results have since been superseded by the CDFG/USBR MLR Model. Lastly, there exists no method to determine the splittail’s minimum viable population because, again, no current survey was designed specifically to monitor splittail population size.

Since the publication of the Final Rule listing the splittail as threatened, a hypothetical analytical model was developed and presented at the January 29, 2001, CALFED Bay-Delta Program (CALFED) Splittail Science Conference. The model is described in detail in the White Paper (Moyle *et al.*, 2001). Service staff attended the aforementioned conference and are aware of the model. A second review draft was provided to us on June 18, 2001.

We believe that the model is, at present, only a tool for testing existing hypotheses and for generating new hypotheses. Certain findings may be interpreted to support listing and others may counter it, but we have determined that neither is sufficiently robust to be included in this final document. Indeed, once refined by the incorporation of more accurate data, the model may be useful for determining those mitigation and restoration efforts likely to have the greatest benefit to the splittail.

Comment 22: A respondent claimed that any decline evident in the Suisun Marsh OT data, or in any other survey

demonstrating a decline, might be due to a shift in the splittail’s distribution, rather than a decline in numbers.

Our Response: Data do suggest that splittail shift their distribution in response to salinity conditions, and that they are quick to respond and move into an area when conditions become favorable (see Background section). However, we believe our survey information is robust enough to detect a decline (see Abundance section).

Comment 23: One respondent objected to our determination in the January 12, 2001, notice (66 FR 2828), that rock revetment, or riprap, as it presently exists or is proposed, would have any significant impact upon the splittail.

Our Response: While a general dismissal of riprap and other types of levee and bank protection is likely overly broad, the application of riprap and other bank treatments that has occurred throughout the splittail habitat has resulted in the decreases in habitat that have led to this examination of the status of the species. Bank protection can be placed on levees and riverbanks without damaging habitat, but it must be done so with explicit considerations for the habitat needs of the affected species. Our analysis in this rule accepts that premise as part of our underlying review of the CALFED and CVPIA contemplated actions.

Comment 24: A respondent asked if we would address the impacts of boating and other activities affecting near-shore habitat.

Our Response: The impacts of boating are not considered a significant source of habitat loss. In many regions of the Delta, wave wash is a natural phenomenon related to winds crossing areas of great fetch (open areas). The splittail evolved with the effects of wave wash within near-shore habitat.

Comment 25: One respondent differed with the determination in our January 12, 2001, notice (66 FR 2828), that California’s variable Mediterranean climate is a threat to native fish, and contended instead that it favors native fish over non-native fish. The respondent also stated that the splittail had evolved subject to the vagaries of California’s climate and was adapted to survive them.

Our Response: Our notice stated that “The variability of California’s Mediterranean climate *exacerbates the threats* (emphasis added) * * *” to the splittail. The Mediterranean climate includes periods of extended normal and above-normal precipitation but may also include periods of extended drought. Splittail evolved under these conditions and are adapted to them. We

agree with the respondent that the splittail had evolved subject to the variability of California’s climate and has adapted to survive this variability.

Comment 26: One respondent stated that pesticide application is not a threat to the splittail because no data were presented to support the assumption that pesticides bioaccumulate in fish to the point of causing morbidity, mortality, or reduced reproduction. Several respondents took similar exception to our statements regarding the need for pesticide use on crops to be assessed and possibly regulated. The respondent also claimed pesticides were no more of an environmental problem within the bypasses than in other areas and that there was no reason to justify separate or additional regulatory programs that would apply only to the bypasses. A respondent stated that pesticides may be present, but that they have been flushed from the bypasses prior to spawning. Another respondent stated that much of the pesticide loading in the Yolo Bypass was due to runoff from upstream sites.

Our Response: Please see our discussion under threats. In general, there are findings that have heightened our concern regarding these substances. However, there is little data on the direct affects to splittail.

Comment 27: A respondent felt that we were inconsistent when it was stated in the January 12, 2001, reopening of comment period (66 FR 2828), that wetland rehabilitation could be deleterious to the splittail, but that wetland habitat improvements within the species’ range would be beneficial. The respondent felt we had not “* * * integrated its concepts and concerns in a manner that weighs relative risks and concepts.”

Our Response: We agree with the respondent that wetland restoration projects are generally beneficial to splittail.

Comment 28: A respondent felt that our statement that the present operation of Federal, State and private water development projects, that entail water storage, diversions, re-diversions, and agricultural return flows, destroy splittail habitat was incorrect.

Our Response: We refer the respondent to the section entitled Summary of Factors Affecting the Species.

Comment 29: A respondent felt that we did not adequately acknowledge the positive environmental effects of the CVP and SWP. The respondent specifically noted that the inland extent of saltwater intrusion into the Delta is currently lower than with the “without-project” condition.