

1 ROBERT G. DREHER, Acting Assistant Attorney General
 United States Department of Justice
 2 Environment & Natural Resources Division
 3 SETH M. BARSKY, Chief
 S. JAY GOVINDAN, Acting Assistant Chief
 4 BRADLEY H. OLIPHANT, Trial Attorney (Cal. Bar. No. 216468)
 Wildlife and Marine Resources Section
 5 999 18th St., South Terrace, Ste. 370
 Denver, CO 80202
 6 T: 303-844-1381 | F: 303-844-1350
 7 ROBERT P. WILLIAMS (D.C. Bar No. 474730)
 Trial Attorney
 8 Benjamin Franklin Station, P.O. Box 7369
 601 D. Street, NW, Room 3028 (20004)
 9 Washington, D.C. 20044-7369
 10 T: (202) 305-0216 | F: (202) 305-0275

11 *Attorneys for Federal Defendants*

12
 13 **UNITED STATES DISTRICT COURT**
EASTERN DISTRICT OF CALIFORNIA
 14 **FRESNO DIVISION**

15
16
17
18 THE CONSOLIDATED DELTA SMELT
19 CASES

Lead Case:
1:09-cv-407-LJO-DLB

Member Cases:
 1:09-cv-422-LJO-DLB
 1:09-cv-631-LJO-DLB
 1:09-cv-892-LJO-GSA
 Partially Consolidated With:
 1:09-cv-480-LJO-GSA
 1:09-cv-1201-LJO-DLB

**Declaration of Ren Lohofener In
 Support of the Joint Status Report
 and Request to Further Extend
 the Remand Schedule For The
 Delta Smelt Biological Opinion**

20
21
22
23
24
25
26
27 THE CONSOLIDATED SALMONID
28

Lead Case:
 1:09-cv-1053-LJO-DLB
 Member Cases:
 1:09-cv-1090-LJO-DLB
 1:09-cv-1378-LJO-DLB
 1:09-cv-1520-LJO-DLB

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

CASES

1:09-cv-1580-LJO-DLB
1:09-cv-1625-LJO-SMS

**Declaration of Ren Lohofener In
Support of the Joint Status Report
and Request to Further Extend
the Remand Schedule For The
Delta Smelt Biological Opinion**

1 I, Ren Lohofener, declare as follows:

2 1. I am the Regional Director of the Pacific Southwest Region of the U.S. Fish and
3 Wildlife Service (“Service”). In this capacity, I oversee approximately 1,000 employees in
4 California, Nevada, and Oregon employed in support of numerous programs and projects
5 including National Wildlife Refuges, Endangered Species, Conservation Partnerships, Science
6 Applications, Migratory Birds, Fisheries, and numerous subprograms such as environmental
7 contaminants, fish passage, and many others.

8 2. The Pacific Southwest Region’s Bay Delta Fish and Wildlife Office is staffed by
9 approximately 35 employees. Among many obligations, this office administers the Endangered
10 Species Act (ESA) in the Bay Delta Region, including preparation of the draft and final remand
11 Biological Opinions (BiOp) regarding the effects of the continued long-term operation of the
12 Central Valley Project (CVP) and State Water Project (SWP) on delta smelt. This office
13 participates in the Collaborative Science and Adaptive Management Program (CSAMP).
14 Additionally, this office is working on many important efforts in the San Francisco Bay, the
15 Delta and its tributaries, such as providing technical assistance in the development of the Bay
16 Delta Conservation Plan (BDCP) and participating as a federal co-lead agency in the
17 corresponding NEPA process, implementation of the Central Valley Project Improvement Act
18 (CVPIA), and participating in the State Water Resources Control Board’s revision of the Water
19 Quality Control Plan for the Bay-Delta.

20 3. I approved and signed the Service’s final 2008 BiOp on the Long Term Operations of
21 the Central Valley Project and State Water Project that found jeopardy and adverse modification
22 of designated critical habitat for the delta smelt (“2008 Smelt BiOp”), and I am familiar with the
23 litigation that has followed.

24 4. I am also familiar with the CSAMP created by the agencies and certain parties to the
25 litigation to provide both an avenue to supplement existing scientific processes and a greater
26 voice to stakeholders in scientific investigations regarding some of the more contentious fish
27 protective actions. The CSAMP is intended to enhance existing efforts to determine if there are
28 alternative methods of achieving equivalent or improved biological protection for listed species

1 with less impact to water supply. I filed two declarations with this Court, one in November,
2 2012, and one in February, 2013, in support of the extension of the remand schedule and
3 development of the CSAMP.

4 5. The Service has devoted substantial time and resources towards initiating and
5 undertaking the CSAMP process. Since this Court granted the initial year extension on remand, I
6 and members of my staff have spent approximately 1,000 hours developing and participating in
7 the CSAMP process.

8 6. Even in the absence of litigation, development of new ecological science is a slower
9 process than most people appreciate, and much slower than we would like. The CSAMP seeks
10 to provide answers to difficult delta smelt ecology questions that are critical to effective
11 conservation and management. For instance, response variables such as smelt abundance,
12 growth rates, and mortality rates, which are usually driven by multiple factors, can be hard to
13 measure and the relationships between variables are often complicated. The historical record is
14 also incomplete. For instance, some of the most critical information, including winter adult
15 distribution, larval distribution, and turbidity has been sampled for less than twenty years, and
16 some key sampling stations in various surveys have been surveyed less than ten years. Although
17 a great deal has been learned about delta smelt, much more science-related work for this species
18 (and longfin smelt) is needed. Developing new understanding often requires that new field
19 sampling approaches be deployed over several years to obtain the observations needed to
20 complete studies.

21 7. Despite the inherent difficulty of the underlying scientific questions and the past
22 opposing litigation positions among the participants, the CSAMP has made excellent progress
23 during its first ten months. Among other accomplishments since the Court's April 2013 Order:
24 (1) a two-tier organizational structure (a Policy Group and the Collaborative Adaptive
25 Management Team (CAMT)) has been established to implement the CSAMP; (2) a mission
26 statement and standards for meeting conduct have been developed; (3) three priority topics of
27 urgency and relevance have been agreed upon; (4) a framework and process for collaboration has
28 been developed; (5) expert subgroups to support the process have been created; and (6) work

1 plans to address the priority topics of urgency have been drafted. A detailed discussion of these
2 efforts is included in the Progress Report to the Collaborative Science Policy Group.

3 8. As noted in the prior paragraph, CSAMP has created expert subgroups to support the
4 process. More specifically, the CAMT, an eleven-member working group of high-level
5 managers and senior scientists, has created these expert subgroups to focus on fall outflow,
6 entrainment, and South Delta salmon survival. These three priority issues were areas of
7 fundamental disagreement in the 2008 Smelt BiOp, the National Marine Fisheries Service's 2009
8 Biological Opinion ("2009 Salmon BiOp"), and associated litigation.

9 9. In regards to each of the two issues that affect delta smelt (fall outflow and
10 entrainment), the CAMT has acknowledged the roles of existing scientific and adaptive
11 management efforts pertaining to these issues, and has developed a new set of questions that
12 incorporate stakeholder viewpoints. The CAMT has assigned subgroups to review and discuss
13 conceptual models, ascertain areas of agreement and disagreement in regards to the conceptual
14 models, and develop key questions and draft hypotheses. These CAMT studies will be
15 implemented alongside existing science and adaptive management processes. The schedule for
16 implementation is outlined in Table 2-2 and further detailed in the attached Progress Report to
17 the Collaborative Science Policy Group. It is expected that answers to these key questions will,
18 along with the findings of the other processes, contribute to answering questions about the
19 relative importance of drivers and mechanisms. To the extent that these findings help refine or
20 more precisely focus protective actions for delta smelt than was previously possible, I expect the
21 processes to contribute to more efficient use of resources and progressively greater agreement
22 among all interested parties. The subgroups have proposed work plans that will produce results
23 in the coming year.

24 10. As detailed in the Progress Report to the Collaborative Science Policy Group, the
25 CSAMP has also provided an approach for continued work on model development. As noted in
26 my previous declaration, multiple independent peer reviews, including the National Research
27 Council review, have identified a lack of quantitative models as a shortcoming in developing and
28 implementing the 2008 Smelt BiOp. The collaborative science process currently underway

1 offers the opportunity to work with the various State, Federal, and private stakeholders involved
2 in the CSAMP to use existing models that have been developed and to further develop those and
3 other models. We can use those models to make predictions about system responses to
4 management actions. The models are a quantitative description of our understanding of how the
5 system works.

6 11. After a series of productive discussions and technical group sessions in 2013 and
7 January 2014, the CAMT has agreed to jointly consider the application of important modeling
8 efforts to potentially: (a) improve our understanding of entrainment impacts, in terms of
9 percentage of the population; (b) improve our understanding of the population viability
10 consequences of water project effects; and (c) refine the existing protective measures for
11 entrainment by increasing emphasis on prevention of the conditions that create entrainment risk.
12 Because of the technical difficulty involved with these undertakings, completing the proposed
13 modeling efforts will require at least two additional years and new resources. In the likely event
14 that technical hurdles prove more challenging than currently projected, additional time may be
15 required. Despite these potential constraints, the Service believes that it is worth pursuing these
16 important efforts, which may help us better understand the relationship between management
17 actions and environmental responses.

18 12. As discussed in my previous declaration, the Service and the U.S. Bureau of
19 Reclamation (Reclamation) – through the Interagency Ecological Program (IEP) – have been
20 utilizing the Fall Outflow Adaptive Management Program (FOAMP) as part of the
21 implementation of the Fall X2 action in the 2008 Smelt BiOp RPA. The FOAMP was designed
22 to evaluate the effectiveness of the RPA action and potential alternatives to it over a ten-year
23 period. The collaborative efforts of dozens of agency and academic scientists who have
24 contributed thousands of hours of effort to the program have produced many important products
25 that are relevant to the issues addressed in the BiOp. The Modeling and Synthesis Team
26 (“MAST”) Report by the IEP that is due out in winter 2014 represents a major effort to integrate
27 the results of Fall Outflow studies undertaken since 2011. Results from this study will be
28 important when the Service prepares a new Biological Opinion. We are working to make the

1 next phase of this investigation a part of CSAMP by expanding the scientific leadership of the
2 effort to include stakeholder groups, as well as by giving the CAMT a role in management of the
3 scientific content of the program. Additional time to continue the CAMT work to develop new
4 scientific information in coordination with the FOAMP will enhance both efforts, benefitting the
5 science used in development of the new Biological Opinion.

6 13. Since this Court's April 2013 Order, substantial work has been done related to the
7 turbidity models that I discussed in my previous declaration. In 2013, the Service worked
8 closely with Metropolitan Water District (MWD) and others on the application of these models
9 to the question of whether stronger "preventive" actions designed to reduce early entrainment
10 risks might pay off in the form of a reduced need for "curative" actions designed to manage
11 entrainment once substantial risks already exist. The Service and MWD presented proof-of-
12 concept modeling results to an independent expert panel provided by the state's Delta Science
13 Program in November. Interested CAMT members are already participating in the development
14 of next steps in the analysis, and we expect the CAMT to play a key role in the development of
15 an analysis of potential prevention scenarios for a meeting with the same independent panel in
16 late 2014. In February, 2014, the Service, with the assistance of Reclamation, initiated a new
17 delta smelt sampling regime that will work in concert with the turbidity models to better provide
18 decision space for water managers.

19 14. Information collected from the new sampling regime will assist in addressing a key
20 CAMT work plan question regarding the effect of various environmental variables on
21 entrainment risk. Giving the CAMT additional time to address those entrainment questions will
22 improve the Service's ability to design and interpret early warning monitoring in the future. As
23 already noted, the new early warning monitoring will work in concert with turbidity and
24 distributional information that is also being developed to better provide decision space for water
25 managers during the drought.

26 15. Dr. Ken Newman of my staff is working to build a life cycle model (LCM)
27 combining the current knowledge of the species life history with the extensive trawl survey data
28 on distribution and abundance of delta smelt. Phase 1 of this effort is developing a life history

1 model for delta smelt, and Phase 2 will either develop multiple single species life history models
2 for one or more fish species, or a single integrated multi- species life history model. A
3 presentation of Newman's delta smelt LCM work was given in May 2013. The model reached a
4 milestone state of development and a first publication is in preparation. In addition, the Service
5 has hired a PhD graduate, Leo Polansky, for a minimum of 2 years, to provide technical
6 assistance with ongoing preliminary exploratory data analysis, state -space model formulation,
7 and model fitting. Also in May 2013, Dr. Newman began collaborative work with David
8 Fullerton (MWD) and Mark Maunder (Inter-American Tropical Tuna Commission), with the
9 latter providing technical assistance with model fitting using AD Model Builder.

10 16. At the time of my previous declarations, the CSAMP was a fledgling effort involving
11 an unprecedented level of collaboration. As of the date of this declaration, we are now seeing
12 the first results of the collaboration and I believe it holds great promise for developing
13 collaborative joint science that will be used to answer difficult questions. I strongly believe this
14 process is a much better solution than using the courtroom to test scientific hypotheses or seek
15 collaborative solutions. Fully developing the CSAMP will take time, however. A further
16 extension of the remand schedules is both necessary and warranted to provide more time to allow
17 this collaboration to fully develop and produce the result we are all looking for: a collaborative
18 science based effort that resolves difficult issues.

19 17. The collaborative spirit fostered by the CSAMP has allowed the principals to
20 produce results in areas beyond the remanded BiOps. In particular, in late 2013 the state and
21 federal agencies met a major milestone in the BDCP process, with the release of the draft BDCP
22 and draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) for public
23 review. As noted in my December 7, 2012 declaration, the BDCP is a conservation plan being
24 developed pursuant to the Endangered Species Act and state Natural Communities Conservation
25 Plan Act (NCCPA). BDCP is a high priority for the State of California, and the federal
26 government is being responsive to the State's needs by devoting substantial staff and resources to
27 help the state develop a scientifically rigorous plan. I do not believe that this significant
28

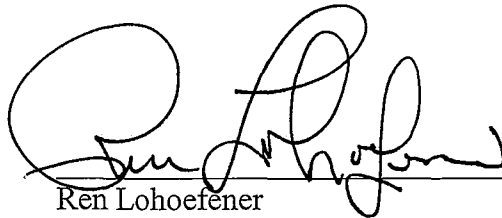
1 achievement would have been possible if the parties had remained in an adversarial posture
2 regarding the smelt and salmon BiOps.

3 18. In addition, the previously adversarial parties have continued to work collaboratively
4 through the CSAMP and other processes despite the tension caused by poor hydrologic
5 conditions currently being experienced in many parts of California. While to date this water
6 year no restrictions on water exports have been needed to ensure the survival of delta smelt, the
7 collaborative relationship has been instrumental in finding solutions for human health and safety
8 in this difficult water year.

9 19. If the Court declines to grant a further extension of the remand schedule in the smelt
10 case, the Service will be required to prepare a new BiOp by the end of 2014. We believe that the
11 likelihood of facing a legal challenge to that BiOp would be significant, which would return the
12 parties to their adversarial corners at a time when continued collaboration is imperative. Thus,
13 for this, and the reasons discussed above and detailed further in the attached Progress Report to
14 the Collaborative Science Policy Group, we are seeking another year to make additional progress
15 on the CSAMP and the development of collaborative science.

16
17 I declare under the penalty of perjury under the laws of the State of California and the United
18 States, that the foregoing is true and correct to the best of my knowledge.

19
20 Dated this 14th day of February, 2014

21
22
23 

24 Ren Lohofener
25 Director, Pacific Southwest Region
26 U.S. Fish and Wildlife Office
27
28