



EARTHJUSTICE

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

July 20, 2016

*Via Certified Mail
Return Receipt Requested*

The Honorable Sally Jewell
Secretary of the Interior
U.S. Department of the Interior
1849 C Street, N.W.
Washington, D.C. 20240

The Honorable Penny Pritzker
Secretary of Commerce
U.S. Department of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Estevan López, Commissioner
U.S. Bureau of Reclamation
1849 C Street, N.W. (91-00000)
Washington, D.C. 20240-0001

Eileen Sobeck, Assistant Administrator
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

David Murillo, Regional Director
Mid-Pacific Regional Office
U.S. Bureau of Reclamation
2800 Cottage Way (MP-100)
Sacramento, CA 95825-1898

Re: Sixty-Day Notice of Violations of the Endangered Species Act by Failing to Reinitiate Consultation on Klamath Project Operations

Dear Secretary Jewell, Secretary Pritzker, Commissioner López, Assistant Administrator Sobeck, and Regional Director Murillo:

On behalf of Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, and Klamath Riverkeeper (collectively "PCFFA"), we hereby provide notice pursuant to the Endangered Species Act ("ESA"), 16 U.S.C. § 1540(g)(2)(A), that the Bureau of Reclamation ("Bureau") and National Marine Fisheries Service ("NMFS") are in violation of the ESA for failing to reinitiate consultation on Klamath Project Operations. More particularly, the incidence of disease in juvenile salmon exceeded the limits in the incidental take statement in both 2014 and 2015, the first two years under the Biological Opinion on the Effects of Proposed Klamath Project Operations from May 31, 2013 through March 31, 2023. Under the ESA implementing regulations and the 2013 biological opinion on Klamath Project Operations, the Bureau and NMFS have a legal obligation to reinitiate consultation on the biological opinion in light of these exceedances, but have not done so.

I. LEGAL BACKGROUND

Under Section 7 of the ESA, federal agencies must ensure that their actions are not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of the species' critical habitat. 16 U.S.C. § 1536(a)(2). Such agencies, called "action agencies," must discharge this obligation in consultation with, and with the assistance of, the expert fish and wildlife agency – NMFS in the case of salmon. *Id.*

"Action" is defined broadly to encompass "all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies." 50 C.F.R. § 402.02. Both the consultation and no-jeopardy obligations extend to ongoing actions over which the agency retains discretionary control. *See Pacific Rivers Council v. Thomas*, 30 F.3d 1050, 1054-55 (9th Cir. 1994).

For actions that may adversely affect a listed species or critical habitat, a formal consultation with the fish and wildlife agency is required. 50 C.F.R. § 402.14. At the conclusion of a formal consultation, the expert fish and wildlife agency issues a biological opinion assessing the effects of the action on the species and its critical habitat, determining whether the action is likely to jeopardize the continued existence of the species or adversely modify its critical habitat and, if so, offering a reasonable and prudent alternative that will avoid jeopardy or adverse modification. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g)-(h).

The ESA prohibits the unauthorized "take" of endangered species, which includes harm caused by habitat degradation, 16 U.S.C. § 1538(a)(1); 50 C.F.R. § 17.3; *see Sweet Home Chapter of Communities for a Greater Oregon v. Babbitt*, 515 U.S. 687 (1995). NMFS has extended the take prohibition to threatened species and to salmon in particular. 50 C.F.R. §§ 227.11(a), 227.71; 65 Fed. Reg. 42,422 (2000). If a federal action undergoing consultation will take a listed species, the biological opinion must include an "incidental take statement" that specifies the amount and extent of incidental take of listed species that may occur and "terms and conditions." 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i). The incidental take statement provides a safe harbor, insulating from take liability activities undertaken in compliance with the incidental take statement's terms and conditions. 16 U.S.C. § 1536(o)(2); *Arizona Cattle Growers' Ass'n v. U.S. Fish and Wildlife Service*, 273 F.3d 1229, 1239 (9th Cir. 2001).

An incidental take statement serves as a check on the biological opinion's assumptions and conclusions. It sets out a "trigger" that specifies an unacceptable level of take that invalidates the safe harbor and requires the agencies to reinitiate consultation. *Id.* at 1249. The limit is often numerical, but can be stated in terms of ecological conditions, as long as they are linked to the take of the listed species. *Id.* at 1249-50.

The ESA implementing regulations provide:

Reinitiation of formal consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and

(a) If the amount or extent of taking specified in the incidental take statement is exceeded; [or]

(b) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered

50 C.F.R. § 402.16 & (a)-(b). If either of these triggers occurs, both the action agency and the expert fish and wildlife agency have a duty to reinitiate consultation. *Salmon Spawning & Recovery Alliance v. Gutierrez*, 545 F.3d 1220, 1229 (9th Cir. 2008).

II. 2013 BIOLOGICAL OPINION AND INCIDENTAL TAKE STATEMENT

The Klamath Basin, once the third most productive salmon river in the Continental United States, is home to a massive irrigation project that withdraws large volumes of water for agriculture in this arid region. The Bureau operates the Klamath Project.

In 1997, NMFS listed Southern Oregon Northern California Coast ("SONCC") coho salmon as threatened. 62 Fed. Reg. 24,588 (May 6, 1997). One of the key factors for decline of the SONCC coho is water withdrawals and habitat degradation from the Klamath Project. NMFS has designated accessible reaches of the river, its tributaries, and estuary as critical habitat. 64 Fed. Reg. 24,049 (May 5, 1999). In the recent SONCC status review, NMFS identified *Ceratomyxa Shasta* (*C. Shasta*) (now also alternatively referred to as *Ceratomyxa nova*) as one of the most significant threats to SONCC coho due to its prevalence and impacts on juvenile coho in the Klamath Basin. SONCC Status Review at 34.

In the early years after the coho listing, the Bureau operated the Klamath Project under annual plans and acknowledged that these plans were actions subject to Section 7, although it consulted on only some of these annual plans. See *PCFFA v. Bureau of Reclamation*, 138 F. Supp. 2d 1228 (N.D. Cal. 2001) (holding Bureau violated ESA by failing to consult on annual plan and limiting irrigation deliveries when flows fall below minimums to meet coho needs).

The agencies then began adopting ten-year operating plans and consultations on those plans. The first long-term plan covered 2002-2012. NMFS released a biological opinion in May 2002, concluding that the proposed operations under the plan would likely jeopardize the coho and adversely modify their critical habitat. NMFS offered a reasonable and prudent alternative

that provided for minimum flows that would increase gradually throughout the life of the plan. In September 2002, more than 60,000 adult salmon died from infections and low flows in the lower Klamath River as they were returning to spawn.

PCFFA, the Yurok and Hoopa Valley Tribes, and others challenged the biological opinion's reasonable and prudent alternative for providing insufficient flows to SONCC coho salmon. The district court held the flow regime invalid because it provided for only a portion of the flows needed by SONCC coho, and the 9th Circuit held that NMFS acted arbitrarily by requiring the necessary flows only in the last few years of the plan, leaving the coho with insufficient flows in the early years. *Pacific Coast Federation of Fishermen's Ass'ns v. Bureau of Reclamation*, 426 F.3d 1082 (9th Cir. 2005).

The Bureau reinitiated consultation in 2007. In June 2008, NMFS issued a draft jeopardy biological opinion, and in March 2008, it released a final jeopardy biological opinion covering operations through 2018. Because of some tension between NMFS' reasonable and prudent alternative for coho and the Upper Klamath Lake levels deemed necessary by Fish and Wildlife Service to support endangered suckers, the agencies embarked on a comprehensive consultation integrating the needs of the species under the jurisdiction of both expert agencies. One of the sticking points in the NMFS consultation proved to be inadequate minimum spring flows, in large part because of the incidence of disease in juvenile salmon. The Bureau revised the proposed action to include minimum flow targets in April-June, some high-flow events, and an adaptive management program to minimize fish disease.

The consultation culminated in May 2013 in a joint NMFS-Fish and Wildlife Service biological opinion on the 2013-2023 Klamath Project operations. NMFS relied heavily on the newly added minimum flows and disease management program to make a no-jeopardy call. NMFS based this conclusion on its view that the management regime with these additions would improve conditions for coho compared to the historical and recent period of record.

Of all of the adverse effects, "NMFS concludes that disease risk from *C. Shasta* is the most significant to coho salmon because *C. Shasta* is a key factor limiting salmon recovery in the Klamath River." BiOp at 376; *see id.* at 341 (*C. Shasta* is a key limiting factor for SONCC coho recovery). *Ceratomyxa Shasta* or *C. Shasta* is a parasite that causes mortality and sublethal harm to juvenile salmon, including coho and Chinook. Infection rates increase when densities of *C. Shasta* spores are high, when the worms (polychaetes) that host the parasite are abundant, when juvenile salmon congregate and transmit disease, and when high temperatures render juvenile salmon more susceptible to infection and disease-related mortality. BiOp at 339, 341, 343. Low flows make coho more susceptible to *C. Shasta* because *C. Shasta* densities tend to be higher and juveniles more crowded together into warm waters. Minimum spring flows are designed to dilute *C. Shasta* densities and reduce transmission rates, and channel maintenance flows scour sediments and dislodge and flush out host worms. BiOp at 342-47.

As with the other impacts, NMFS believed the proposed operations would lead to an improvement over historical and recent conditions. Specifically, "NMFS concluded that the proposed action will likely result in disease risks to coho salmon fry and juveniles that are lower than under the observed POR [period of record] conditions." BiOp at 391. NMFS acknowledged that it "does not have information to specifically estimate what the reduced *C. Shasta* infection rates for salmon will be under the proposed action; however, for the reasons described . . . NMFS concludes that the incidental take of coho salmon fry and juveniles would not exceed the rates observed in the POR." *Id.*

NMFS imposed two types of limits in the incidental take statement to serve as a check on its conclusion that the 2013-2023 operations would improve conditions for coho. First, it established minimum flows for the months of March to August, and identified the first three months – April-June – as critical for reducing disease in fry and juvenile salmon. BiOp at 28, 389. Second, NMFS set a limit on the incidence of *C. Shasta*. It used infection rates in Chinook salmon as a surrogate for SONCC coho because Chinook are more abundant, Chinook and coho have similar susceptibility to *C. Shasta*, and Chinook disease monitoring has been in place since 2004. NMFS used the monitoring data since 2004 and set the incidental take statement's limit at the highest percentage of *C. Shasta* infection rates from that data, 49% via quantitative polymerase chain reaction ("QPCR"), the limit of relevance here. As NMFS explained:

By using the highest percentage of *C. Shasta* infection rates for Chinook salmon observed in the POR, NMFS has a secondary surrogate in addition to the March to August minimum daily average IGD flows and the EWA volumes to estimate the incidental take of coho from increased disease risk.

BiOp 391. The biological opinion then spelled out the consequences if the disease rates are higher than these limits:

If the percent of *C. Shasta* infections for Chinook salmon juveniles in the mainstream Klamath River between Shasta River and Trinity River during May to July exceed these levels . . . reinitiation of consultation will be necessary.

Id.

III. EXCEEDANCE OF THE INCIDENTAL TAKE STATEMENT'S LIMITS ON *C. SHASTA* AND THE DUTY TO REINITIATE CONSULTATION

The pertinent limit in the incidental take statement on the rate of juvenile salmon infections with the *C. Shasta* parasite is 49% via QPCR. Chinook salmon infection rates were

81% in 2014 and 91% in 2015, exceeding this limit in the first two years under the biological opinion.

In July 2015, the Bureau sent NMFS a letter entitled, "Notification of Modification, Amendment, Clarification, and/or Reinitiation of Formal Consultation on Klamath Project Operations." In the letter, the Bureau indicated that the agencies should begin "comprehensive discussions" to address the impacts of recent drought conditions on listed species and the biological opinion. The Bureau described the issue as follows:

During the time that Reclamation has been implementing the Proposed Action under the BiOp, unprecedented, multi-year drought conditions have persisted which have caused variations in operations and hydrologic conditions that were not anticipated at the time the Proposed Action was analyzed in the BiOp.

Letter to Lisa Van Atta, NMFS, from Therese O'Rourke Bradford, Bureau Klamath Basin Area Manager (July 17, 2015). In light of these conditions, the Bureau indicated a desire "to begin comprehensive discussions to clearly establish a path forward to resolve the outstanding issues." *Id.*

The exceedances of the disease rates established as caps in the incidental take statement require reinitiation of consultation by the terms of both the ESA implementing regulations and the 2013 biological opinion. The ESA implementing regulations require reinitiation of consultation whenever the amount or extent of taking exceeds that specified in the incidental take statement. 50 C.F.R. § 402.16 & (a). The 2014 and 2015 infection rates – 81% and 91%, respectively – exceed 49% by substantial margins. For its part, the biological opinion underscored the import of the infection rate limits and made it clear that reinitiation of consultation will be necessary if they are exceeded. BiOp at 391.

Reinitiation of consultation is also required because, as the Bureau's July 2015 letter attests, the multi-year drought conditions caused changes in both hydrologic conditions and Klamath Project operations that were not anticipated and thus not considered in the 2013 biological opinion. Moreover, NMFS is developing a new model and reassessing historic conditions, both of which constitute new information not previously considered. Under the ESA implementing regulations, these developments constitute additional triggers for reinitiating consultation. 50 C.F.R. § 402.16(b).

Moreover, adult salmon returning to the Trinity River in 2014 experienced an outbreak of another parasite called *Ichthyophthirius multifiliis* or *Ich*. This same disease led to the death of more than 60,000 adult salmon in 2002 before they spawned. A similar fish kill was averted in 2014 because of flow enhancements from the Trinity River in that year as well as in 2013 and 2015. These emergency flow releases are not mandated in the operation plans for either the

Klamath or Trinity Rivers. Nor have they been the subject of a completed ESA consultation on the impact of flows in the Lower Klamath River on threatened coho salmon. Reinitiation of consultation on the Klamath Project is necessary to assess the impact of the Klamath Project's operations on adult salmon migration and *Ich* outbreaks and the need for greater flow released from Upper Klamath Lake to prevent the harm that has occurred in recent years.

NMFS responded to the Bureau's request by letter dated March 29, 2016. NMFS confirmed that the incidence of *C. Shasta* exceeded the limits in the incidental take statement in both 2014 and 2015. Rather than reinitiate consultation, NMFS indicated that it would revise the incidental take statement prior to the 2017 water year commencing April 1, 2017. This course of action runs counter to the ESA implementing regulations and the terms of the incidental take statement, which require reinitiation of consultation when infection rates exceed 49%.

The biological opinion's no-jeopardy conclusion hinges on NMFS' belief that conditions for SONCC coho will be better, and most particularly that *C. Shasta* infection and mortality rates, will be lower under the 2013-2023 flow regime than the rates measured previously. To provide a check on this conclusion, the incidental take statement set a hard limit on infection rates that coincided with the highest infection rates ever measured in Chinook – 49%. Infection rates exceeded 49% in the first two years under the biological opinion by huge margins, calling into question NMFS' assumptions and its no-jeopardy conclusion.

NMFS asserts in its March 2016 letter (at 2) that the biological opinion's effects analysis and conclusions are no longer valid. The documented infection rates prove this is not the case. While the biological opinion assumed that drought conditions would result in low flows and higher infection rates than in wet years, NMFS assumed that the infection rates would never exceed the historical record. Yet that is what transpired in both 2014 and 2015. The linchpin of the no-jeopardy conclusion – that coho will be better off under the 2013-2023 management regime than recent history – has proven to be a fallacy. NMFS must reconsider its assumptions in light of these developments and assess the impacts on SONCC coho of the high infection rates and mortalities in the juvenile salmon in the past two seasons.

It is not enough for NMFS to change the metric used in the incidental take statement. NMFS' March 2016 letter explains that additional research and refinement of the Chinook and *C. Shasta* monitoring will soon be available. NMFS should consider the new information and refined monitoring tools in the reinitiated consultation. The fact remains that *C. Shasta* infection rates were inordinately high in 2014 and 2015 under the only monitoring that compares historic and current infection rates. The incidental take statement established a 49% infection rate as an upper limit. Both under the terms of the biological opinion and the ESA regulations, this limit is a trigger which requires reinitiation of consultation when it is exceeded. *See Arizona Cattle Growers' Ass'n v. U.S. Fish and Wildlife Service*, 273 F.3d at 1249. Clearly, the minimum spring

Sixty-Day Notice

July 20, 2016

Page 8

flows, the periodic high flows, and the adaptive disease management program offered by the Bureau to obtain NMFS' no-jeopardy conclusion did not work as NMFS assumed they would. Reinitiation of consultation is the only appropriate and legal course of action under these circumstances.

The exceedances of the incidental take statement's limits render moot or eliminate the safe harbor that the take statement had provided. The Bureau is no longer insulated from liability for the take of juvenile salmon resulting from elevated *C. Shasta* infection rates. *C. Shasta* produces both lethal and sublethal effects in juvenile coho, and low flows and high temperatures make juvenile coho more susceptible to mortality.

This sixty-day notice follows similar notices sent by the Hoopa Valley, Yurok, and Karuk Tribes, which have federally recognized fishing rights in the Klamath River. Like the Tribes, we would like to discuss this matter with the Bureau and NMFS in the hope of obtaining reinitiation of consultation and appropriate protective measures during that process. As part of those discussions, we would also like to have the agencies commit to complete consultation over the project's impacts on essential fish habitat, as required by 16 U.S.C. § 1855. If NMFS and the Bureau are unwilling to reinitiate consultation and minimize take of juvenile coho from *C. Shasta*, we plan to seek redress through litigation.

Sincerely,



Patti Goldman
Managing Attorney, Northwest Office
Earthjustice
705 Second Avenue, Suite 203
Seattle, WA 98104-1711
T: (206) 343-7340 x 1032
F: (206) 343-1526
pgoldman@earthjustice.org