

1 lower Klamath River. Administrative Record (“AR”), Lodging Recognized at 00016-17. Plaintiffs, the
2 San Luis & Delta Mendota Water Authority (“Authority”) and Westlands Water District (“Westlands”)
3 allege that by approving and implementing the 2013 FARs, Reclamation and its parent agency, the U.S.
4 Department of the Interior (“Interior”)¹ (collectively, “Federal Defendants”), violated various provisions
5 of the Central Valley Project Improvement Act (“CVPIA”), Pub. L. No. 102-575, 106 Stat. 4700 (1992),
6 and the Reclamation Act of 1902, 43 U.S.C. § 383. Doc. 95, First Amended Complaint (“FAC”) at ¶¶
7 77-91. In addition, Plaintiffs allege Federal Defendants acted unlawfully by approving and
8 implementing the 2013 FARs without first preparing an Environmental Impact Statement (“EIS”)
9 pursuant to the National Environmental Policy Act (“NEPA”), 42 U.S.C. § 4321 *et seq.*, or engaging in
10 consultation pursuant to the Endangered Species Act (“ESA”), 16 U.S.C. §§ 1531 *et seq.* FAC ¶¶ 92-
11 104.

12 Plaintiffs filed suit in this Court on August 7, 2013, Doc. 1, and on August 9, 2013, filed a
13 motion for temporary restraining order and preliminary injunction. Doc. 14. On August 13, 2013, in part
14 because more than 100,000 acre-feet (“AF”) of water were potentially at issue, this Court issued a
15 Temporary Restraining Order (“TRO”) against implementation of the 2013 FARs to provide additional
16 time to evaluate the parties’ positions. Doc. 57. The Court heard evidence and argument during a two-
17 day hearing starting August 21, 2013. On August 22, 2013, the Court lifted the injunction, finding that
18 the 2013 FARs were justified and that the threatened water loss had diminished to less than 20,000 AF.
19 Doc. 91.

20 Federal Defendants filed the AR on December 20, 2013, Doc. 109, and supplemented the record
21 on January 29, 2014, Doc. 110. Currently pending before the court are highly complex cross-motions for
22 summary judgment addressing Plaintiffs’ challenges to the 2013 FARs. The initial briefing on the cross
23 motions for summary judgment (“Merits Briefing”) was completed in mid-May 2014 and included more
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25 ¹ The First Amended Complaint also names as Defendants in their official capacities: Sally Jewell, the Secretary of the U.S.
26 Department of the Interior; Michael L. Connor, Commissioner of the Bureau; and David Murrillo, Regional Director of the
Bureau’s Mid-Pacific Region. Doc. 95.

1 than 250 pages of argument along with thousands of pages of relevant record material. The Court has
2 been working diligently to resolve the motions within the means of its resources. The Court was very
3 close to resolution of the merits issues when it received notice that Plaintiffs planned to file a motion for
4 temporary restraining order/preliminary injunction (“TRO/PI Motion”) to enjoin Federal Defendants
5 from making another flow augmentation release starting August 23, 2014 (“2014 FARs”). The stated
6 purpose of the 2014 FARs is to “improve environmental conditions and decrease the likelihood of
7 another epizootic outbreak of Ich and an associated fish die-off.” Doc. 165-1, August 22, 2014 Decision
8 Memorandum to Support Emergency Activities for: Emergency Lower Klamath River Flow
9 Augmentation During Late Summer 2014 (“August 22 Decision Memorandum”), at 1. The TRO/PI
10 Motion raises numerous arguments on the merits of the 2014 FARs that overlap with the Merits
11 Briefing.

12 Upon notice of the impending TRO/MI motion, the Court accelerated its efforts to resolve
13 completely the cross motions for summary judgment in anticipation that such acceleration might aid
14 resolution of the TRO/PI Motion. These efforts have confirmed the Court’s belief, expressed in previous
15 decisions in this case, that Plaintiffs are likely to succeed on at least one claim in this case. Upon review
16 of the TRO/PI Motion and Oppositions, however, and for the reasons discussed below, the Court
17 believes that injunctive relief is not warranted, and would not be even if Plaintiffs achieve actual success
18 on the merits.

19 Plaintiffs filed their TRO/PI Motion, Docs. 142 & 143, along with supporting declarations and
20 exhibits, on Monday August 25, 2014. Federal Defendants and all Defendant-Intervenors filed
21 responses, Docs. 158 (Hoopa Valley Tribe), 160 (Pacific Coast Federation of Fishermen’s Associations),
22 165 (Federal Defendants), 166 (Yurok Tribe), and supporting materials on August 26, 2014. All parties
23 obviously have worked diligently to present this emergency motion to the Court in a timely manner. The
24 Court believes the papers present the issues cogently and finds it appropriate to rule without oral
25 argument. *See* Local Rule 230(g).

1 **II. STANDARD OF DECISION**

2 The standard test for injunctive relief requires establishment of four factors by a preponderance
3 of the evidence:

- 4 (1) likelihood of success on the merits;
- 5 (2) likelihood the moving party will suffer irreparable harm absent
6 injunctive relief;
- 7 (3) the balance of equities tips in the moving parties' favor; and
- 8 (4) an injunction is in the public interest.

9 *Winter v. Natural Resources Defense Council*, 555 U.S. 20, 24 (2008); *Am. Trucking Ass'n v. City of Los*
10 *Angeles*, 559 F.3d 1046, 1052 (9th Cir. 2009). Even where a plaintiff has prevailed on the merits,
11 injunctive relief is not automatic. Under such circumstances, a request for injunctive relief is governed
12 by a modified standard that requires a plaintiff establish:

- 13 (1) that it has suffered an irreparable injury;
- 14 (2) that remedies available at law, such as monetary damages, are
inadequate to compensate for that injury;
- 15 (3) that, considering the balance of hardships between the plaintiff and
16 defendant, a remedy in equity is warranted; and
- 17 (4) that the public interest would not be disserved by a permanent
injunction.

18 *Sierra Forest Legacy v. Sherman*, 646 F.3d 1161, 1184 (9th Cir. 2001) (citing *eBay Inc. v.*
19 *MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006)). Under either circumstance, the Court must evaluate a
20 plaintiff's showing of irreparable injury, balance any showing of injury against the hardships that would
21 result from imposition of an injunction, and consider the public interest.

22 **III. DISCUSSION**

23 **A. Likelihood of Success on the Merits.**

24 The Court believes it is highly likely that Plaintiffs will prevail on at least one claim in this case.
25 Specifically, the Court remains unconvinced by Federal Defendants' assertion that the 1955 Act
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1 provided authorization for the 2013 FARs. Federal Defendants have acknowledged that they did not rely
2 on any independent, alternative authorization for the 2013 FARs. Doc. 169. The Court notes, however,
3 that numerous possible alternative authorities exist. One such alternative, Federal Defendants' trust
4 obligations to Defendant-Intervenors the Hoopa Valley Tribe and the Yurok Tribe, was discussed at
5 length in the Merits Briefing. Accordingly, if (and likely when) Plaintiffs prevail on the 1955 Act issue,
6 Federal Defendants are not left wholly without options by which FARs could be justified, not to mention
7 that they would have the right to appeal this Court's interpretation of the 1955 Act.

8 **B. Irreparable Harm/Balance of the Harms.**

9 **1. Projected Water Cost of the 2014 FARs.**

10 On August 23, 2014, Reclamation began implementing the 2014 FARs by increasing releases
11 from Lewiston Reservoir from approximately 450 cubic feet per second ("cfs") to approximately 950
12 cfs, to achieve a flow rate of 2,500 cfs in the lower Klamath River. At 7:00 am, on Monday, August 25,
13 2014 releases from Lewiston were increased to approximately 2,450 cfs, to achieve a flow rate of
14 approximately 4,000 cfs in the lower Klamath, a flow that was maintained for approximately 24 hours,
15 before returning to 950 cfs. Reclamation plans to regulate releases to maintain lower Klamath flows at
16 approximately 2,500 cfs until approximately September 14, 2014. Doc. 146, Declaration of Charles
17 Hanson ("Hanson Decl."), Ex. 2 (August 22, 2014 Press Release). The 2014 FARs will utilize a total of
18 approximately between 25,000 and 30,000 AF of water. Doc. 145, Declaration of James ("Snow Decl.")
19 at ¶ 2; Doc 173-1, page 5 of 11 (August 22, 2014 ESA § 7 Compliance Memorandum). By the time
20 Plaintiffs filed their TRO/PI Motion, the 24-hour pulse flow was already almost complete. By the time
21 this Memorandum Decision and Order issues, less than 48 hours after the TRO/PI Motion was filed,
22 injunctive relief would impact only approximately eighteen (18) days of the 2014 FARs. Accepting
23 Reclamation's estimate that it will need to increase releases from the default minimum instream flow of
24 450 cfs to 950 cfs during the remaining 18 days, that is a 500 cfs increase per day, which works out to
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1 approximately 992 AF per day,² or 17,856 AF over 18 days.

2 In addition to the current releases, Reclamation has indicated that if there is evidence of a disease
3 outbreak, Reclamation will increase releases from Lewiston Reservoir to double flow in the lower
4 Klamath River for one week. Doc. 147, Declaration of Ara Azhderian (“Azhderian Decl.”) at ¶ 17. If
5 doubling occurred for one week, emergency releases would consume about 35,000 additional acre-feet
6 of Trinity River Division (“TRD”) storage. Snow Decl. at ¶ 19.³

7 **2. Current Drought Conditions**

8 California is in the grip of an historic drought. See *AquAlliance v. U.S. Bureau of Reclamation*,
9 2014 WL 3401390 at *4-*5 (E.D. Cal. July 11, 2014); *Friant Water Auth. v. Jewell*, ___ F. Supp. 2d
10 ___, 2014 WL 2197993, at *7 (E.D. Cal. May 27, 2014). CVP agricultural water service contractors
11 north and south of the Delta, including most of Plaintiff San Luis & Delta-Mendota Water Authority’s
12 (“Authority”) member agencies, have received a contract allocation of zero (0) percent. Azhderian Decl.
13 at ¶ 3. In 2014, members of the San Joaquin River Exchange Contractors Water Authority (“Exchange
14 Contractors”) and wildlife refuges south of the Delta, both whom are members of the Authority, have
15 received a 65 percent allocation, in spite of statutory and contractual obligations for Reclamation to
16 provide a minimum of 75 percent allocation to both groups of contractors. *Id.*; Ortega Dec. at ¶ 7; *Friant*
17 *Water Auth.*, 2014 WL 2197993, at *4, *7.

18 **3. Impact of Using Water for the 2014 FARs on Plaintiffs.**

19 Plaintiffs break down into several categories the possible impacts to their interests. First, they
20 claim there will be impacts this year to Reclamation’s ability to augment supplies to certain categories of
21 CVP water users. In particular, Plaintiffs point out that Reclamation has special contractual
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24 ² The Court utilized a common conversion to render this estimate. See U.S.G.S. Conversion Calculator, *available at*
<http://md.water.usgs.gov/cfscalculator/> (last visited August 27, 2014).

25 ³ The Court has previously criticized the rationale for any such flow doubling measure. See Doc. 91 at 18 n.7. It does not
26 appear that Reclamation currently plans to implement any such measure. Should conditions change, Plaintiffs may seek
appropriate relief.

1 commitments and statutory obligations to the Exchange Contractors and wildlife refuges. Snow Decl. at
2 ¶ 21; Doc. 148, Declaration of Ricardo Ortega (“Ortega Decl.”) at ¶ 10. Additional deliveries are sorely
3 needed in 2014 by both groups of Authority members. For example, Ricardo Ortega, the General
4 Manager of the Grasslands Water District, a California public agency that operates and maintains the
5 water conveyance system that delivers CVP water to eight wildlife habitat areas in the western San
6 Joaquin River Valley, states that the current 65% Level 2 water allocation to the CVP wildlife refuges
7 will not provide enough water to keep waterfowl and other species, including threatened and endangered
8 species such as the giant garter snake, healthy and alive this years. Ortega Decl. at ¶ 12.

9 However, the possibility that the 2014 FARs will impact Reclamation’s ability to augment
10 supplies to the Exchange Contractors and/or CVP wildlife refuges is belied by the factual record. Ronald
11 Milligan, the Manager of the Central Valley Operations Office of Reclamation’s Mid-Pacific Region,
12 with responsibility for the day-to-day operations of the CVP (and a considerable track record of
13 providing unbiased and accurate information to this Court), states that Reclamation does “not anticipate
14 changing the volume of water diverted from the TRD as a result of the flow augmentation action.” Doc.
15 163, Declaration of Ronald Milligan (“Milligan Decl.”), at ¶ 7. This puts to rest any concern that the
16 2014 FARs will impact Plaintiffs’ interests this year.

17 More justified is Plaintiffs’ concern that the 2014 FARs may impact water allocations in 2015.
18 Operational forecasts indicate that a zero (0) percent initial allocation for south-of-Delta agricultural
19 water service contractors next year is likely. Snow Decl. at ¶ 30. According to Plaintiffs’ declarant
20 James Snow, a civil engineer with extensive experience in evaluating CVP water supply, Trinity
21 Reservoir is very unlikely to refill in 2015, and hence the water in storage in the reservoir next year will
22 likely be lower by the full amount of the 2014 Excess Releases. Snow Decl. at ¶¶ 22-28. Mr. Milligan
23 does not dispute the general assertion that storage will likely be reduced by the 2014 FARs and that this
24 may have “incremental impact on water supplies, power generation, and cold-water pool management.”
25 Milligan Decl. at ¶ 10. The Court has reviewed the present record and believes it is appropriate to
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1 incorporate by reference its prior findings with respect to the impact of water supply reductions on

2 Plaintiffs:

3 The record establishes that the water supply situation in Plaintiffs' service
4 areas is already dire, with resulting economic and environmental harms.
5 See Docs. 17- 22. Although it is true that current conditions on the ground
6 cannot be traced to the 2013 flow augmentation plan, it is equally true that
7 every additional acre foot of surface water Plaintiffs is able to obtain from
8 the CVP will help alleviate these harms. See Doc. 20 at ¶ 9 ("even a small
9 increase in surface water" would help offset the harms caused by
10 increased groundwater use).

11 Doc. 91 at 16.

12 However, two things must always be considered when evaluating harm to CVP water users. CVP
13 operators are subject to numerous legal and contractual obligations. Even if the 2014 FARs were not
14 permitted, there is no guarantee that any additional water supply would ever end up in Plaintiffs' hands.
15 For example, while certain of the Authority's members have priority contracts with Reclamation, others
16 hold contractual rights to CVP water that are junior to many other CVP contract holders and subject to
17 diminishment for numerous other reasons, including satisfying needs of species listed under the
18 Endangered Species Act ("ESA"). See generally *O'Neill v. United States*, 50 F.3d 677 (9th Cir. 1995).

19 **4. Potential Harm to the Environment if Augmentation is Not Permitted.**

20 On the other side of the balance, the flow augmentation releases are designed to prevent a
21 potentially serious fish die-off from impacting salmon populations entering the Klamath River estuary.
22 Doc. 165-1 at 1. There is no dispute -- and the record clearly reflects -- that the 2002 fish kill had severe
23 impacts on commercial fishing interests and tribal fishing rights, and that another fish kill would likely
24 have similar impacts. See, e.g., Docs. 46 (Declaration of Michael Orcutt) & 48-1 (Declaration of David
25 Bitts).

26 For the sake of efficiency, the Court will begin its analysis of the need for the action by
referencing to its prior analysis of the subject following a hearing on the merits of Plaintiffs' 2013
request for a preliminary injunction:

All experts appear to be in agreement that there were certain "contributing

1 factors” to the 2002 fish kill. 8/21/13 RT at 42-43. First, there were
2 “remarkably low flows” during August and September of 2002. *Id.* at
3 42:4-5. Second, there were “crowded fish conditions,” due both to the
4 relatively large run size and the relatively large percentage of that run
5 made up of Klamath sub-basin fish, which fish tend to linger for extended
6 periods of time in the lower reaches of the Klamath before initiating
7 further upstream migration. *Id.* at 42:5-11, 54:7-18. Finally, there were
8 some migration delays and relatively high temperatures. *Id.* at 42: 8-11.

6 Dr. Joshua Strange, who among the testifying experts appears to have the
7 most relevant background, education and experience relative to the key
8 issues, emphasized the importance of the flow component in light of the
9 biology of the Ich parasite. Ich, a ciliated protozoan, *id.* at 45:6-7, has a
10 very well understood life cycle, *id.* at 138:23-139:2. It has a free-
11 swimming infectious stage, during which time it must find a host fish or
12 die. *See id.* at 137:9-14. Ich cannot live for long in open water, and usually
13 only has 72 hours to find a host. *See id.* at 139:21-23. Once it locates a
14 host, it must attach itself and “burrow in” to the host, where it is able to
15 feed on the fish’s fluids and mature. *Id.* at 137:9-14. After reaching
16 maturity, it exits the fish and drops into the river, where it divides and then
17 bursts, releasing free-swimming offspring into the water. *Id.* at 137:15-20.

12 In its free-swimming stage, Ich is a weak swimmer, *id.* at 139:14, relying
13 on tiny hairs to provide mobility, *id.* at 137:20. This poor swimming
14 capability is what makes flow so important to disrupting the parasite’s life
15 cycle. If water velocities are higher, Ich will have more trouble
16 successfully contacting a fish using its chemosensory abilities. *See*
17 *generally id.* at 142-43. Higher flow also can interfere with the “delicate
18 docking procedure” Ich must undertake to attach to its host fish. *Id.* at
19 143:5-9.

17 Fish density is also important to Ich transmission, because, in a nutshell,
18 the more fish surface area available for contact, the greater chance Ich will
19 find a place to land. *Id.* at 141:3-12. Temperature can also have some
20 impact on Ich transmission rate, as Ich matures more quickly at warmer
21 temperatures. *Id.* at 141:17-142:7.

20 Dr. Strange has examined Ich in the Klamath in detail relative to the
21 factors identified after the 2002 fish kill. Flows in the lower Klamath
22 rarely drop below 2500 cfs. *Id.* at 148:10-11. The average flow for that
23 location from the last week of August to the third week of September is
24 3200 cfs. *Id.* at 148:18-19. There have only been two years in which flows
25 dropped below 2500 cfs and the run size was relatively large. *Id.* at 149:7-
26 14. One of those years was 2002, the year of the fish kill. The other was
1988, which experienced no fish kill. *Id.* at 149:7-19. Dr. Strange opined
that this pattern could be interpreted in one of two ways. Either there is a
50/50 chance of a fish kill under similar circumstances, or there may be a
distinction between the two years. *Id.* at 149-151. He indicated that one
possible distinction was the relatively high level of harvest in 1988, which
might have minimized crowding that year. *Id.* at 155:10-16. In either case,

1 he believes there is a “significant level of risk” of an Ich outbreak should
2 similar conditions be permitted to prevail. *See id.* at 162:6-15.

3 He supported this opinion with examples of Ich outbreaks from other river
4 systems, namely several outbreaks in British Columbia and another in
5 Butte Creek, a tributary to the Sacramento River. Strange Decl., Doc. 86, ¶
6 3.3. He further explained that Ich is believed to be always present in the
7 background in the lower Klamath, residing in resident fish species. *Id.* at
8 146:14-17.

9 In his opinion, flows of 2,500 cfs are the absolute minimum required for a
10 reasonable level of confidence that an Ich outbreak is unlikely to occur.
11 Strange Decl. ¶ 4.1. In years with larger projected run sizes, he
12 recommends maintaining a slightly higher base flow of 2,800 cfs. *Id.* at ¶
13 4.2. Plaintiffs’ expert Dr. Hanson did not disagree with this general
14 approach from a biological perspective, although he pointed out that there
15 is simply an absence of information that would permit a “finer level of
16 resolution” to evaluate “incremental effects of ...changes in management
17 strategies.” 8/22/13 RT.

18 Dr. Strange emphasized the importance of preventing an Ich outbreak
19 before one occurs, given that it is very difficult to get ahead of the disease
20 once it takes hold in a population. 8/21/13 RT at 146-47.

21 Doc. 91 at 16-18 (footnotes omitted).

22 Plaintiffs point out that circumstances this year (2014) are not identical to those that prevailed in
23 2013. For this very reason, earlier this summer, Reclamation determined that FARs would not take place
24 this year. Reclamation’s past reasoning and the basis for its current position is worth exploring.

25 According to Plaintiffs, in 2012 and 2013, Reclamation “relied” on two triggers for making
26 additional late summer releases from Trinity Reservoir: a large fall-run Chinook salmon run and low
flow conditions. Doc. 151 at 4 (citing AR 01178; AR 00016). But, Reclamation never explicitly relied
on those triggers to the exclusion of others. For example, in the Final Environmental Assessment (“EA”)
and Finding of No Significant Impact (“FONSI”) for the 2012 FARs, Reclamation explained that

Federal, Tribal, and State biologists studying the die-off concluded that:
(1) pathogens *Ichthyophthirius multifiliis* (Ich) and *Flavobacterium columnare* (*Columnaris*) were the primary causes of death to fish; and (2)
warm water temperatures, low water velocities and volumes, high fish density, and long fish residence times likely contributed to the disease outbreaks and subsequent mortalities (Guillen 2003; Belchik et al. 2004; Turek et al. 2004). [¶] Outbreaks of Ich occur when conditions are favorable for rapid multiplication of the parasite, such as warm water, high

1 fish densities, and stressed fish.

2 AR 001178. In 2012, the coincidence of “relatively large runs” and “drier than normal hydrologic”
3 conditions prompted the 2012 FARs. *Id.* Likewise, the EA for the 2013 FARs noted numerous
4 contributing factors and the then-present coincidence of two of them: “predictions of large runs” and
5 “drier than normal hydrologic conditions.” AR 00016. The 2013 EA, for example, noted an estimated
6 escapement of approximately 272,000 fall-run to the Klamath Basin for 2013. *Id.* There is also record
7 evidence that managers consider escapements above 170,000 to be “large.” AR 01345.

8 This year, in contrast, the projected escapement for 2014 is approximately 93,000. Hanson Decl.
9 ¶ 17 & Exh. 3 at 37. Yet, on July 8, 2014, Reclamation indicated to representatives of the Authority that
10 it was considering making additional late-summer releases from Trinity Reservoir. Azhderian Decl. at ¶
11 14. On July 10, 2014, the Pacific Fishery Management Council (“PFMC”) requested Reclamation weigh
12 allocations of water and pursue all necessary measures to set aside water for fall-run Chinook salmon.
13 *Id.* at ¶ 15 & Ex. 2 (Doc. 147-2). On July 22, 2014, the Authority and several CVP contractors sent a
14 letter to Reclamation urging the agency to deny PFMC’s request for late summer releases. *Id.* at ¶ 16 &
15 Ex. 3 (Doc. 147-3).

16 In a July 30, 2014 conference call with CVP water and power customers, Reclamation
17 representatives announced that they would not make “preventative” releases in 2014 due to the lower-
18 than-average estimate of returning Chinook salmon and the importance of preserving cold water. *Id.* at ¶
19 17. Reclamation also stated that if monitoring indicated an actual outbreak of Ich disease, the agency
20 would be prepared to provide emergency releases. *Id.* An August 2013 memorandum jointly developed
21 by the National Oceanic and Atmospheric Administration Fisheries division and the U.S. Fish and
22 Wildlife Service (“FWS”) (“2013 Memorandum”) set forth criteria that would trigger a finding that an
23 Ich outbreak was in progress: (1) confirmed diagnosis of severe Ich infection of the gills in 5% or
24 greater in a sample size of 30 to 60 fish, or (2) observed mortality of >50 adult salmonids in a 20 km
25 reach within a 24 hour time period coupled with confirmed presence of Ich by FWS’s Fish Health
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1 Center. If either criterion was triggered, Reclamation committed to augmenting flows in the lower
2 Klamath River to double the preexisting flow for 7 consecutive days. *Id.*; *see also* Doc. 163, Declaration
3 of Brian Person (“Person Decl.”) at ¶ 8.

4 Reclamation’s July 30, 2014 decision was scrutinized by a diverse set of groups, including
5 Native American Tribes, the State of California, California county governments, members of
6 California’s Congressional delegation, and environmental groups. Person Decl. at ¶ 9. In response,
7 Reclamation began investigation and discussion with state and federal fishery experts, tribal fishery
8 experts, and consultants to further assess current conditions on the Klamath and, in particular, whether
9 there were pertinent factors unique to the conditions in 2014 that had not been considered in the 2013
10 Memorandum and that required a response different than would be prescribed thereunder. *Id.*

11 Although forecasts for the lower Klamath River predicted low flows, actual flows from Klamath
12 River tributaries were extremely low and in some cases are at or near zero. Doc. 161, Declaration of
13 Donald Reck (“Reck Decl.”), at ¶¶ 10-12. This means that thermal refugia for fish in the tributaries are
14 extremely limited and fish have been holding in the mainstem of the Klamath. *Id.* Temperatures in the
15 lower Klamath River have also been warmer than forecasted. *Id.* Warmer temperatures cause fish to
16 hold in the limited thermal refugia available, which contributes to fish crowding and fish stress. *Id.*

17 Current conditions in the lower Klamath have proved conducive to the growth of blue-green
18 algae, which produce “microcystin” toxin. *Id.* at ¶ 13. Although there are no available studies regarding
19 direct risks to returning adult salmon of exposure to this toxin, there is evidence that juvenile salmonids
20 and resident fish are more susceptible to bioaccumulation of the toxins, and that impacted juvenile and
21 resident fish can then serve as vectors increasing disease risk for returning adult salmon. *Id.* at ¶ 14.

22 Reclamation also considered the fact that significant numbers of adult fish began moving into the
23 lower Klamath River earlier than expected. *Id.* at ¶ 16. Due to the high temperatures and low flows,
24 these fish have been observed holding in thermal refugias in crowded schools. *Id.* As explained in the
25 Declaration of Donald Reck, an Environmental Resources Specialist with Reclamation:
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1 [o]n August 1, 2014, the Klamath Fish Health Assessment Team (KFAT)
2 noted that water temperatures in the river were generally between 24 and
3 26 degrees C and the flow in the lower Klamath River dropped to 2,000
4 cfs. At the same time, thousands of juvenile Chinook salmon and hundreds
5 of adult steelhead and Chinook salmon were crowded into the Bluff Creek
6 cool water refugia, and possibly more than 1,000 adult steelhead and
7 Chinook salmon were crowded into the Blue Creek cool water refugia.
8 About 25 percent of the juvenile fish at the Pecwan cool water refugia
9 showed signs of illness. Adult salmonids crowded into cool water refugia
10 were observed to be stressed and dark in color.

11 A week later, on August 8, the KFAT issued a press release stating that
12 they were on high alert for signs of fish mortality, as there had already be
13 observed dead adult salmonids in the mainstem Klamath River. And a
14 week after that, Dr. Joshua Strange, Stillwater Sciences, prepared a
15 memorandum “Update on Flow Forecast for the lower Klamath River and
16 Adult Fish Kill Risk for 2014” that summarizes environmental conditions
17 in the lower Klamath River at that time.

18 *Id.* at ¶¶ 20-21 & Ex. 3 (August 15, 2014 Memorandum from Dr. Jonathan Strange).

19 Reclamation relied in part on the August 15 Memorandum of Dr. Jonathan Strange, attached to
20 the Declaration of Donald Reck. Doc. 165, Ex. 3. In that Memorandum, Dr. Strange noted a number of
21 “stressors” warranting proactive flow releases. First, the lower Klamath River is experiencing
22 “exceptionally” low flows -- lower than those that occurred in July 2002, the year of the last fish major
23 kill. *Id.* at 2. Second, “a below average run size will not adequately compensate for low flows in terms
24 of fish kill risk” because the “mechanisms responsible for an Ich outbreak ... are not nullified by below
25 average run size,” as “flow ... is the primary determinant.” *Id.* at 4. Third, pre-season forecasts are
26 subject to error. In particular, while Klamath River stocks are predicted to be below average this year,
Columbia River returns are predicted to be the largest on record. Historically, Klamath runs are
consistently larger than average during years of high Columbia River runs. This suggests that “it is more
likely than not that more adult fall run Chinook salmon will return to the Klamath Basin than is
predicted.” *Id.* Fourth, salmonids in the Klamath Basin are “experiencing higher than normal levels of
stress and pre-spawn mortality due to the unusually low flows and high water temperatures, which will
likely result in elevated background levels of fish disease.” *Id.* at 7. “This situation could increase the
subsequent disease risk to later entering fall run fish.” *Id.* Fifth, surveys indicate unusually high levels of

1 a “myxosporidian” parasitic infection among juvenile salmonids in the Klamath River, which could be a
2 “significant and serious additional stressor to migrating adult salmon this fall” *Id.* Finally, Dr. Strange
3 agreed that high levels of blue-green algae could act “synergistically” with the other stressors to make
4 salmon more vulnerable to Ich parasites. *Id.* Overall, Dr. Strange concluded that without proactive flow
5 releases it was “more likely than not” that an Ich epizootic outbreak would occur in the lower Klamath
6 this year. *Id.* Dr. Strange confirmed all of these assertions in a Declaration filed in connection with
7 Federal Defendants’ opposition to the TRO/PI Motion. Doc. 167.⁴

8 On August 22, 2014, Reclamation decided to implement preventative flow augmentation in the
9 lower Klamath River, as set forth in an August 22, 2014 Decision Memorandum to Support Emergency
10 Activities for: Emergency Lower Klamath River Flow Augmentation During Late Summer 2014.

11 The Court finds that, although Reclamation has not presented an entirely consistent approach to
12 determining the need for FARs, the circumstances justify the planned 2014 FARs as a measure needed
13 to prevent a fish kill that could significantly impact this year’s fall-run Chinook in the lower Klamath.

14 **C. Harm to Fish and Other Aquatic Species in the Trinity and Sacramento Rivers.**

15 Plaintiffs’ expert Dr. Hanson asserts that the 2014 FARs will harm fish and other aquatic species
16 in the Trinity and Sacramento River systems. Specifically, he asserts that the unnaturally high, cold
17 flows from the 2014 FARs will harm aquatic resources in the mainstem of the Trinity River, including
18 western pond turtles, yellow-legged frog, and lamprey. Hanson Decl. at ¶¶ 47-48. The Court has
19 reviewed Dr. Hanson’s opinions on these subjects as well as Reclamation’s responses and finds that
20 there are plausible counterpoints to all of Dr. Hanson’s concerns. *See* Reck Decl. at ¶¶ 39, 42, 44-46.
21 Moreover, nothing in Dr. Hanson’s declaration suggests that impacts to any of these species would be
22 nearly as catastrophic as would an Ich outbreak.

23 Dr. Hanson also opines that the 2014 Excess Releases will also harm the winter-run Chinook

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25 ⁴ In Reply, Plaintiffs’ expert Dr. Charles Hanson takes issue with some of the assertions made in the Dr. Strange’s
26 Memorandum and Mr. Reck’s Declaration. Doc. 174. While the Court believes Dr. Hanson has pointed out some potential
issues in need of further clarification and exploration, he does not call into question the primary underpinnings of the 2014
FARs: flows, the primary determinant for Ich outbreaks, are exceptionally low this year.

1 salmon and Central Valley spring-run Chinook salmon in the Sacramento River, which are listed as
2 endangered and threatened under the ESA. This is because the FARs may impact the pool of cold water
3 available to maintain cooler temperatures in the upper Trinity River and the upper Sacramento River,
4 which will impact winter-run and/or spring-run salmon egg incubation in 2015 if the winter of 2015
5 does not result in sufficient flows to refill the reservoirs. Hanson Decl. at ¶¶ 49-50. Reclamation's Mr.
6 Milligan agrees that the 2014 FARs have the potential to impact the cold water pool, Milligan Decl. at ¶
7 10, but this does not necessarily translate into an inability to protect fish runs in the Sacramento River
8 Basin. Reclamation concluded that implementation of the 2014 FARs will not foreclose its ability to
9 implement protective measures called for in the relevant ESA biological opinions governing listed
10 species in the Sacramento River Basin. Reck Decl., Ex. 4 at 3.⁵ Plaintiffs have submitted no evidence to
11 the contrary.

12 **D. Public Interest.**

13 As this Court has previously explained:

14 Both sides of this dispute represent significant public interests. Federal
15 Defendants and Defendant Intervenors correctly point out that the federal
16 government has invested large sums of money into the restoration of the
17 fisheries in question. Yet, it is equally true that the government has and
continues to invest in the long-term viability of agriculture in the Central
Valley. Neither side holds veto power over the other.

18 Doc. 91 at 19.

19 **IV. CONCLUSION AND ORDER**

20 The Court concludes that, even though Plaintiffs are likely to (and in all likelihood soon will)
21 succeed on the merits of at least one of their claims against Reclamation in connection with the 2013
22 FARs, the balance of the harms does not warrant an injunction at this time. Even if the Court were
23 prepared immediately to issue a final ruling on the merits in favor of Plaintiffs, an injunction would not
24 be automatic. The potential harm to the Plaintiffs from the potential, but far from certain, loss of added

25
26 ⁵ Related to ESA-listed species, it is also worth noting that the 2002 fish die off killed an estimated 344 ESA-listed Coho salmon. Reck Decl., Ex. 4 at 1.

1 water supply in 2015 does not outweigh the potentially catastrophic damage that “more likely than not”
2 will occur to this year’s salmon runs in the absence of the 2014 FARs.

3 Plaintiffs’ TRO/PI Motion is **DENIED**.

4 **NOTE:** Federal Defendants are hereby on notice that the Court will view future FARs (and
5 requests to enjoin them) in light of all the circumstances, including the fact that Federal Defendants’
6 repeatedly have treated as “emergency” circumstances that appear to merit a consistent, reasoned, policy
7 rationale. All involved deserve a reasonable opportunity to challenge any such rationale, and all
8 interested, including the Court, deserve to be able to give to these issues “the time and attention [they]
9 deserve.” *San Luis & Delta-Mendota Water Auth. v. Jewell*, 747 F.3d 581, 606 (9th Cir. 2014). Failure
10 to heed this notice may disappoint Defendants in future orders.

11
12 IT IS SO ORDERED.

13 Dated: August 27, 2014

/s/ Lawrence J. O’Neill
14 UNITED STATES DISTRICT JUDGE