

No. 19-547

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**In the Supreme Court of the United States**

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UNITED STATES FISH AND WILDLIFE SERVICE, ET AL.,  
PETITIONERS

*v.*

SIERRA CLUB, INC.

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*ON WRIT OF CERTIORARI  
TO THE UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT*

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**JOINT APPENDIX**

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PETITION FOR A WRIT OF CERTIORARI FILED: OCT. 25, 2019  
CERTIORARI GRANTED: MAR. 2, 2020

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UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT

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Docket No. 17-16560

SIERRA CLUB, INC., PLAINTIFF-APPELLEE

*v.*

UNITED STATES FISH AND WILDLIFE SERVICE AND  
NATIONAL MARINE FISHERIES SERVICE,  
DEFENDANTS-APPELLANTS

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**DOCKET ENTRIES**

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<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
8/7/17	<u>1</u>	DOCKETED CAUSE AND ENTERED APPEARANCES OF COUNSEL. SEND MQ: Yes. The schedule is set as follows: Mediation Questionnaire due on 08/14/2017. Appellants National Marine Fisheries Service and United States Fish and Wildlife Service opening brief due 11/13/2017. Appellee Sierra Club, Inc. answering brief due 12/13/2017. Appellant's optional reply brief is due 21 days after service of the answering brief. [10534748] (RT) [Entered: 08/07/2017 09:36 AM]

DATE	DOCKET NUMBER	PROCEEDINGS
		* * * * *
9/21/17	<u>12</u>	Filed (ECF) Appellee Sierra Club, Inc. Unopposed Motion to expedite case. Date of service: 09/21/2017. [10589715] [17-16560] (Super, Reed) [Entered: 09/21/2017 03:17 PM]
9/26/17	<u>13</u>	Filed clerk order (Deputy Clerk: LK): Appellee's unopposed motion (Docket Entry No. [12]) to expedite is granted. This case will be calendared as soon as possible upon completion of briefing. The opening brief is due October 13, 2017; the answering brief is due November 13, 2017; and the optional reply brief is due within 21 days after service of the answering brief. The parties shall refrain from seeking any streamlined extension of time to file a brief. Any motion for an extension of time to file a brief pursuant to Ninth Circuit Rule 31-2.2(b) shall be accompanied by a showing of compelling circumstances. [10594316] (OC) [Entered: 09/26/2017 10:46 AM]
10/13/17	<u>14</u>	Submitted (ECF) Opening Brief for review. Submitted by Appellants NMFS and United States Fish and Wildlife Service. Date

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		of service: 10/13/2017. [10617893] [17-16560] (Pulham, Thomas) [En- tered: 10/13/2017 04:54 PM]
10/13/17	<u>15</u>	Submitted (ECF) excerpts of rec- ord. Submitted by Appellants NMFS and United States Fish and Wildlife Service. Date of service: 10/13/2017. [10617902] [17-16560] (Pulham, Thomas) [Entered: 10/13/2017 04:58 PM]
		* * * * *
11/13/17	<u>19</u>	Submitted (ECF) Answering Brief for review. Submitted by Appel- lee Sierra Club, Inc.. Date of ser- vice: 11/13/2017. [10651212] [17-16560] (Super, Reed) [Entered: 11/13/2017 12:14 PM]
11/13/17	<u>20</u>	Submitted (ECF) supplemental ex- cerpts of record. Submitted by Appellee Sierra Club, Inc.. Date of service: 11/13/2017. [10651244] [17-16560] (Super, Reed) [Entered: 11/13/2017 12:27 PM]
		* * * * *
11/20/17	<u>24</u>	Submitted (ECF) Amicus brief for review (by government or with con- sent per FRAP 29(a)). Submitted by Union of Concerned Scientists. Date of service: 11/20/2017. [10661177] [17-16560] —[COURT

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		UPDATE: Attached corrected brief. 11/21/2017 by SLM] (Goho, Shaun) [Entered: 11/20/2017 01:59 PM]
		* * * * *
12/18/17	<u>33</u>	Submitted (ECF) Reply Brief for review. Submitted by Appellants NMFS and United States Fish and Wildlife Service. Date of service: 12/18/2017. [10694682] [17-16560] (Pulham, Thomas) [Entered: 12/18/2017 03:03 PM]
		* * * * *
2/5/18	<u>39</u>	Filed clerk order (Deputy Clerk: OC): Defendants-Appellants are directed to submit the twelve documents that the district court held, after in camera review, must be disclosed in full or in part (NMFS 44516.1, FWS 252, NMFS 5427.1, FWS 279, FWS 308, FWS 555, NMFS 61721, NMFS 5597.1, NMFS 7544.2, NMFS 37695, NMFS 37667, NMFS 14973.1) for review by this Court in camera and under seal using the event "Notice of Filing Document under Seal and Submit Sealed Document." [10751723] (OC) [Entered: 02/05/2018 01:56 PM]

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
2/13/18	40	Filed (ECF) IN CAMERA and UNDER SEAL Appellants NMFS and United States Fish and Wildlife Service notice of filing document under seal. Type of document: other (Documents requested by the Court's Order of February 5, 2018.). Date of service: 02/13/2018. [10762960] [17-16560] (Pulham, Thomas) [Entered: 02/13/2018 04:15 PM]
2/13/18	41	Filed IN CAMERA and UNDER SEAL Appellants NMFS and United States Fish and Wildlife Service exhibits requested by the Court's Order of February 5, 2018. Served on 02/13/2018 (Document previously submitted in [40]). [10763033] (SML) [Entered: 02/13/2018 04:38 PM]
3/15/18	42	ARGUED AND SUBMITTED TO J. CLIFFORD WALLACE, MARSHA S. BERZON and TERRENCE BERG. [10800013] (Learned, Glen) [Entered: 03/15/2018 02:23 PM]
3/15/18	<u>43</u>	Filed Audio recording of oral argument. <b>Note:</b> Video recordings of public argument calendars are available

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		on the Court's website, at <a href="http://www.ca9.uscourts.gov/media/">http://www.ca9.uscourts.gov/media/</a>
		[10801959] (DO) [Entered: 03/16/2018 02:33 PM]
8/3/18	<u>44</u>	Filed (ECF) Appellants NMFS and United States Fish and Wildlife Service citation of supplemental authorities. Date of service: 08/03/2018. [10964930] [17-16560] (Pulham, Thomas) [Entered: 08/03/2018 09:38 AM]
8/10/18	<u>45</u>	Filed (ECF) Appellee Sierra Club, Inc. citation of supplemental authorities. Date of service: 08/10/2018. [10973071] [17-16560] (Super, Reed) [Entered: 08/10/2018 11:20 AM]
		* * * * *
12/3/18	48	Filed SEALED order (J. CLIFFORD WALLACE, MARSHA S. BERZON and TERRENCE BERG) (SEE ORDER FOR FULL TEXT). All counsel served via email. [11106444] (RMM) [Entered: 12/03/2018 09:47 AM]
12/6/18	49	Filed (ECF) UNDER SEAL Appellee Sierra Club, Inc. motion to file document under seal and submit sealed document. Type of document: other (Letter). Date of service: 12/06/2018. [11112559]



<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		[17-16560]—[COURT UPDATE: Attached corrected motion and brief. 12/7/2018 by TYL] (Super, Reed) [Entered: 12/06/2018 02:02 PM]
12/7/18	<u>50</u>	Filed Appellee Sierra Club, Inc. motion to file document UNDER SEAL. Deficiencies: None. Served on 12/06/2018. (Court en- tered filing, originally submitted in [49]) [11113448] (KWG) [Entered: 12/07/2018 08:42 AM]
12/7/18	51	Submitted (ECF) UNDER SEAL Letter Brief for review. Submit- ted by Appellee Sierra Club, Inc.. Date of service: 12/06/2018. (Court-entered filing, brief origi- nally submitted in [49].) [11113470] (KWG) [Entered: 12/07/2018 08:47 AM]
12/21/18	<u>52</u>	Filed order (J. CLIFFORD WAL- LACE, MARSHA S. BERZON and TERRENCE BERG) Plain- tiff-Appellee's motion to seal its letter brief is granted. [11129668] (OC) [Entered: 12/21/2018 08:56 AM]
12/21/18	<u>53</u>	FILED OPINION (J. CLIFFORD WALLACE, MARSHA S. BER- ZON and TERRENCE BERG)

DATE	DOCKET NUMBER	PROCEEDINGS
		<p>For the foregoing reasons the district court's order to produce the December 2013 draft jeopardy biological opinions (NMFS 44516.1 and FWS 252), the March 2014 RPA (FWS 555), and the remaining statistical and instructional documents (NMFS 5597.1, NMFS 61721, NMFS 7544.2, NMFS 37695, NMFS 37667, NMFS 14973.1) is AFFIRMED because the record shows that these materials are not both pre-decisional and deliberative and therefore not exempt under § 522(b)(5) of FOIA, Exemption 5. The district court's order to produce the December 2013 RPAs (FWS 279, 308) and the April 2014 draft jeopardy opinion (NMFS 5427.1) is REVERSED because these materials are both pre-decisional and deliberative and thus exempt from disclosure under FOIA Exemption 5. The parties agree that reversal would require the district court to perform a segregability analysis on remand. We instruct the district court to perform that analysis. The case is REMANDED for further proceedings consistent with this opin-</p>

DATE	DOCKET NUMBER	PROCEEDINGS
		<p>ion. Opinion by Judge Berg; Partial Concurrence and Partial Dissent by Judge Wallace. FILED AND ENTERED JUDGMENT. [11129820] (MM) [Entered: 12/21/2018 09:33 AM]</p> <p>* * * * *</p>
12/21/18	<u>55</u>	<p>Filed clerk order (Deputy Clerk: MM): At the direction of the Court, the parties shall bear their own costs. [11131184] (MM) [Entered: 12/21/2018 02:47 PM]</p> <p>* * * * *</p>
1/24/19	60	<p>Filed text clerk order (Deputy Clerk: WL): Appellants NMFS and United States Fish and Wildlife Service Unopposed Motion to stay appellate proceedings (Docket Entry No. [57]) is granted. [11164746] (WL) [Entered: 01/24/2019 10:14 AM]</p> <p>* * * * *</p>
3/11/19	<u>63</u>	<p>Filed (ECF) Appellants NMFS and United States Fish and Wildlife Service petition for panel rehearing and petition for rehearing en banc (from 12/21/2018 opinion). Date of service: 03/11/2019. [11223577] [17-16560] (Pulham,</p>

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		Thomas) [Entered: 03/11/2019 04:30 PM]
4/1/19	<u>64</u>	Filed order (J. CLIFFORD WALLACE, MARSHA S. BERZON and TERRENCE BERG) Within 21 days from the filing of this order, Plaintiff-Appellee is directed to file a response to the petition for panel rehearing and petition for rehearing en banc (Docket Entry No. [63]). The response shall comply with Federal Rule of Appellate Procedure 32 and Ninth Circuit Rule 40-1. [11248541] (WL) [Entered: 04/01/2019 01:41 PM]
4/22/19	<u>65</u>	Filed (ECF) Appellee Sierra Club, Inc. response opposing Combo PFR Panel and En Banc (ECF Filing), Combo PFR Panel and En Banc (ECF Filing). Date of service: 04/22/2019. [11271374]. [17-16560]—[COURT UPDATE: Updated docket text to reflect content of filing. 4/22/2019 by TYL] (Super, Reed) [Entered: 04/22/2019 08:45 AM]
5/30/19	<u>66</u>	Filed order and amended opinion (J. CLIFFORD WALLACE, MARSHA S. BERZON and TERRENCE BERG) Amending Dispo-

DATE	DOCKET NUMBER	PROCEEDINGS
5/31/19	<u>67</u>	<p>sition Opinion AFFIRMED REVERSED; REMANDED. The Opinion filed December 21, 2018 and reported at 911 F.3d 967 is hereby amended. The amended opinion will be filed concurrently with this order. A majority of the panel has voted to deny the petition for panel rehearing. The full court was advised of the petition for rehearing en banc. No judge requested a vote on whether to rehear the matter en banc pursuant to Fed. R. App. P. 35(f). The petition for panel rehearing and the petition for rehearing en banc are DENIED. Future petitions for rehearing or rehearing en banc will not be entertained in this case. [11313046] (RMM) [Entered: 05/30/2019 09:29 AM]</p> <p>Filed (ECF) Appellee Sierra Club, Inc. Unopposed Motion for miscellaneous relief [Motion under Circuit Rule 39-1.8 to transfer consideration of attorneys fees on appeal to district court]. Date of service: 05/31/2019. [11314708] [17-16560] (Super, Reed) [Entered: 05/31/2019 07:45 AM]</p>

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<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
6/7/19	<u>68</u>	MANDATE ISSUED. (JCW, MSB and TGB) [11322999] (RL) [Entered: 06/07/2019 08:49 AM]
6/17/19	<u>69</u>	Filed order (J. CLIFFORD WALLACE, MARSHA S. BERZON and TERRENCE BERG) Appellee's unopposed motion to transfer consideration of attorneys' fees and litigation costs on appeal to the district court is granted (Dkt. No. [67]). See Circuit Rule 39-1.8. [11333068] (WL) [Entered: 06/17/2019 08:56 AM]

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UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA  
(SAN FRANCISCO)

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Docket No. 3:15-cv-05872-EDL

SIERRA CLUB, INC., PLAINTIFF

*v.*

UNITED STATES FISH AND WILDLIFE SERVICE AND  
NATIONAL MARINE FISHERIES SERVICE, DEFENDANTS

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**DOCKET ENTRIES**

DATE	DOCKET NUMBER	PROCEEDINGS
12/21/15	<u>1</u>	COMPLAINT against National Marine Fisheries Service. Filed by Sierra Club, Inc. Receipt No. 0971-10081040, \$400.00. (Attachments: # <u>1</u> Exhibit A, # <u>2</u> Exhibit B, # <u>3</u> Exhibit C, # <u>4</u> Exhibit D, # <u>5</u> Exhibit E, # <u>6</u> Exhibit F, # <u>7</u> Exhibit G, # <u>8</u> Exhibit H, # <u>9</u> Exhibit I, # <u>10</u> Exhibit J, # <u>11</u> Exhibit K, # <u>12</u> Exhibit L, # <u>13</u> Civil Cover Sheet) (Super, Reed) (Filed on 12/21/2015) Modified on 12/21/2015 (cj1S, COURT STAFF). (Entered: 12/21/2015)
		* * * * *
1/27/16	<u>8</u>	ANSWER to <u>1</u> Complaint by National Marine Fisheries Service. (Garbers, Wendy) (Filed on

DATE	DOCKET NUMBER	PROCEEDINGS
		1/27/2016) Modified on 1/28/2016 (aaaS, COURT STAFF). (Entered: 01/27/16)
		* * * * *
3/15/16	<u>17</u>	CASE MANAGEMENT STATEMENT ( <i>Joint</i> ) filed by National Marine Fisheries Service. (Garbers, Wendy) (Filed on 3/15/2016) (Entered on 3/15/2016)
3/22/16	<u>18</u>	AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF; against All Defendants. Filed by Sierra Club, Inc. (Attachments: # <u>1</u> Exhibit A, # <u>2</u> Exhibit B # <u>3</u> Exhibit C, # <u>4</u> Exhibit D, # <u>5</u> Exhibit E, # <u>6</u> Exhibit F, # <u>7</u> Exhibit G, # <u>8</u> Exhibit H, # <u>9</u> Exhibit I, # <u>10</u> Exhibit J, # <u>11</u> Exhibit K, # <u>12</u> Exhibit L, # <u>13</u> Exhibit M, # <u>14</u> Exhibit N, # <u>15</u> Exhibit O) (Super, Reed) (Filed on 3/22/2016) Modified on 3/23/2016 (aaaS, COURT STAFF). (Entered: 03/22/2016)
		* * * * *
3/22/16	<u>20</u>	<b>Minute Entry for case management conference held before Magistrate Judge Elizabeth D. Laporte on 3/22/2016. Plaintiff to file an amended complaint on 3/22/2016.</b>



DATE	DOCKET NUMBER	PROCEEDINGS
		<p>Current defendant to complete FOIA production by 4/8/2016. A further case management conference is set for 6/7/2016 at 10:00 am in Courtroom E, 15th floor, San Francisco. An updated case management statement shall be filed by 5/31/2016.</p> <p>FTR Time 10:23 - 10:27</p> <p>Plaintiff Attorneys: Nicholas Jimenez and Reed Super (telephonic appearance)</p> <p>Defendant Attorney: Wendy Garbers</p> <p>This is a text only Minute Entry (shyS, COURT STAFF) (Date Filed: 3/22/2016) (Entered: 03/22/2016)</p> <p>* * * * *</p>
4/22/16	<u>24</u>	<p>ANSWER to <u>18</u> Amended Complaint by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 4/22/2016) Modified on 4/25/2016 (aaaS, COURT STAFF). (Entered: 04/22/2016)</p> <p>* * * * *</p>
8/15/16	<u>34</u>	<p>CASE MANAGEMENT STATEMENT (<i>Joint</i>) filed by National Marine Fisheries Service, United</p>

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
8/23/16	35	<p>States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 8/15/2016) (Entered: 08/15/2016)</p> <p><b>Minute Entry for further case management conference held on 8/23/2016 before Magistrate Judge Elizabeth D. Laporte. On or before 9/16/2016, the defendant shall provide Plaintiff with a supplemental privilege log providing additional detail with respect to the entries identified by plaintiff. Plaintiff to identify the documents at issue for summary judgment by 9/30/2016. Parties to submit a joint proposal to the Court regarding a proposed summary judgment briefing schedule by 10/14/2016.</b></p> <p><b>FTR Time: 10:16 - 10:18</b></p> <p><b>Plaintiff Attorneys: Katie Schaefer and Reed Super (telephonic appearance)</b></p> <p><b>Defendant Attorney: Wendy Garbers</b></p> <p><b>This is a text only Minute Entry (shyS, COURT STAFF) (Date Filed: 8/23/2016) (Entered: 08/23/2016)</b></p>
10/13/16	<u>36</u>	<p><b>JOINT CASE MANAGEMENT STATEMENT <i>Re Summary</i></b></p>

DATE	DOCKET NUMBER	PROCEEDINGS
10/18/16	<u>37</u>	<p><i>Judgment</i> filed by United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 10/13/2016) (Entered: 10/13/2016)</p> <p><b>ORDER Adopting Joint Proposal Re Summary Judgment Schedule signed by Magistrate Judge Elizabeth D. Laporte.</b> (shyS, COURT STAFF) (Filed on 10/18/2016) (Entered: 10/18/2016)</p>
12/1/16	<u>40</u>	<p>* * * * *</p> <p>MOTION for Summary Judgment filed by Sierra Club, Inc.. Motion Hearing set for 5/23/2017 09:00 AM in Courtroom E, 15th Floor, San Francisco before Magistrate Judge Elizabeth D. Laporte. Responses due by 2/13/2017. Replies due by 3/17/2017. (Attachments: # <u>1</u> Proposed Order) (Super, Reed) (Filed on 12/1/2016) (Entered: 12/01/2016)</p>
12/1/16	<u>41</u>	<p>Declaration of Reed W. Super in Support of <u>40</u> MOTION for Summary Judgment filed by Sierra Club, Inc.. (Attachments: # <u>1</u> Exhibit Exhibit 1, # <u>2</u> Exhibit Exhibit 2, # <u>3</u> Exhibit Exhibit 3, # <u>4</u> Exhibit Exhibit 4, # <u>5</u> Exhibit Exhibit 5, # <u>6</u> Exhibit Exhibit 6, # <u>7</u></p>

DATE	DOCKET NUMBER	PROCEEDINGS
2/13/17	<u>42</u>	<p>Exhibit Exhibit 7, # <u>8</u> Exhibit Exhibit 8, # <u>9</u> Exhibit Exhibit 9, # <u>10</u> Exhibit Exhibit 10, # <u>11</u> Exhibit Exhibit 11, # <u>12</u> Exhibit Exhibit 12, # <u>13</u> Exhibit Exhibit 13, # <u>14</u> Exhibit Exhibit 14, # <u>15</u> Exhibit Exhibit 15, # <u>16</u> Exhibit Exhibit 16, # <u>17</u> Exhibit Exhibit 17, # <u>18</u> Exhibit Exhibit 18, # <u>19</u> Exhibit Exhibit 19, # <u>20</u> Exhibit Exhibit 20, # <u>21</u> Exhibit Exhibit 21, # <u>22</u> Exhibit Exhibit 22, # <u>23</u> Exhibit Exhibit 23) (Related document(s) <u>40</u>) (Super, Reed) (Filed on 12/1/2016) (Entered: 12/01/2016)</p> <p>MOTION for Summary Judgment <i>Defendants' Cross Motion for Summary Judgment and Opposition to Plaintiff's Summary Judgment Motion; Memorandum of Points and Authorities</i> filed by National Marine Fisheries Service, United States Fish and Wildlife Service. Motion Hearing set for 5/23/2017 09:00 AM before Magistrate Judge Elizabeth D. Laporte. Responses due by 3/17/2017. Replies due by 4/21/2017. (Garbers, Wendy) (Filed on 2/13/2017) (Entered: 02/13/2017)</p>

DATE	DOCKET NUMBER	PROCEEDINGS
2/13/17	<u>43</u>	Declaration of Gary Frazer in Support of <u>42</u> MOTION for Summary Judgment <i>Defendants' Cross Motion for Summary Judgment and Opposition to Plaintiff's Summary Judgment Motion; Memorandum of Points and Authorities Declaration of Gary Frazer</i> filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Attachments: # <u>1</u> Exhibit Exhibit A) (Related document(s) <u>42</u> ) (Garbers, Wendy) (Filed on 2/13/2017) (Entered: 02/13/2017)
2/13/17	<u>44</u>	Declaration of Samuel D. Rauch, III in Support of <u>42</u> MOTION for Summary Judgment <i>Defendants' Cross Motion for Summary Judgment and Opposition to Plaintiff's Summary Judgment Motion; Memorandum of Points and Authorities Declaration of Samuel D. Rauch, III</i> filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Related document(s) <u>42</u> ) (Garbers, Wendy) (Filed on 2/13/2017) (Entered: 02/13/2017)

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DATE	DOCKET NUMBER	PROCEEDINGS
3/31/17	<u>47</u>	OPPOSITION/RESPONSE (re <u>40</u> MOTION for Summary Judgment, <u>42</u> MOTION for Summary Judgment <i>Defendants' Cross Motion for Summary Judgment and Opposition to Plaintiff's Summary Judgment Motion; Memorandum of Points and Authorities</i> ) <i>Opposition to Defendants' Cross Motion for Summary Judgment and Reply to Defendants' Opposition to Plaintiff's Motion for Summary Judgment</i> filed by Sierra Club, Inc.. (Attachments: # <u>1</u> Proposed Order Updated) (Super, Reed) (Filed on 3/31/2017) (Entered: 03/31/2017)
3/31/17	<u>48</u>	Declaration of Reed W. Super in Support of <u>47</u> Opposition/Response to Motion,, filed by Sierra Club, Inc.. (Attachments: # <u>1</u> Exhibit A, # <u>2</u> Exhibit B, # <u>3</u> Exhibit C, # <u>4</u> Exhibit D, # <u>5</u> Exhibit E, # <u>6</u> Exhibit F, # <u>7</u> Exhibit G) (Related document(s) <u>47</u> ) (Super, Reed) (Filed on 3/31/2017) (Entered: 03/31/2017)
5/5/17	<u>49</u>	REPLY (re <u>42</u> MOTION for Summary Judgment <i>Defendants' Cross Motion for Summary Judgment and Opposition to Plaintiff's Sum-</i>

DATE	DOCKET NUMBER	PROCEEDINGS
5/5/17	<u>50</u>	<p><i>mary Judgment Motion; Memorandum of Points and Authorities</i>) filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 5/5/2017) (Entered: 05/05/2017)</p> <p>Proposed Order re <u>40</u> MOTION for Summary Judgment, <u>42</u> MOTION for Summary Judgment <i>Defendants' Cross Motion for Summary Judgment and Opposition to Plaintiff's Summary Judgment Motion; Memorandum of Points and Authorities</i> by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 5/5/2017) (Entered: 05/05/2017)</p>
6/6/17	51	<p><b>Minute Entry for proceedings held on 6/6/2017 before Magistrate Judge Elizabeth D. Laporte regarding the cross motions for summary judgment. By 6/13/2017, Defendants shall lodge in camera the December 2013 Biological Opinions and RPAs, and Parties shall file joint statement with description of lodged documents and summary of which records remain in dispute.</b></p>

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		<b>FTR Time 9:06 - 9:36</b>
		<b>Plaintiff Attorneys: Reed Super and Katie Schaefer</b>
		<b>Defendant Attorney: Wendy Garbers</b>
		<b>This is a text-only Minute Entry (shyS, COURT STAFF) (Date Filed: 6/6/2017) Modified on 9/20/2017: Matter transcribed by Tara Bauer (ECHO Reporting). (rjdS, COURT STAFF). (En- tered: 06/06/2017)</b>
6/13/17	<u>52</u>	<b>JOINT CASE MANAGEMENT STATEMENT filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 6/13/2017) (Entered: 06/13/2017)</b>
6/23/17	<u>53</u>	<b>ORDER RE: In Camera Review by Magistrate Judge Elizabeth D. Laporte. (shyS, COURT STAFF) (Filed on 6/23/2017) (Entered: 06/23/2017)</b>
7/24/17	<u>54</u>	<b>ORDER Following In Camera Re- view by Magistrate Judge Eliza- beth D. Laporte. (shyS, COURT STAFF) (Filed on 7/24/2017) (En- tered: 07/24/2017)</b>



<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
7/24/17	<u>55</u>	<b>JUDGMENT by Magistrate Judge Elizabeth D. Laporte. (shyS, COURT STAFF) (Filed on 7/24/2017) (Entered: 07/24/2017)</b>  * * * * *
7/28/17	<u>58</u>	<b>ADMINISTRATIVE MOTION Stay Pending Appeal re <u>54</u> Order filed by National Marine Fisheries Service, United States Fish and Wildlife Service. Responses due by 8/2/2017. (Garbers, Wendy) (Filed on 7/28/2017) (Entered: 07/28/2017)</b>
7/31/17	<u>59</u>	<b>STIPULATION WITH PROPOSED ORDER re <u>58</u> ADMINISTRATIVE MOTION Stay Pending Appeal re <u>54</u> Order, <u>54</u> Order filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 7/31/2017) (Entered: 07/31/2017)</b>
8/1/17	<u>60</u>	<b>STIPULATION AND ORDER re One-Week Extension of August 7, 2017 Production Deadline and Plaintiff's Response to Motion to Stay signed by Magistrate Judge Elizabeth D. Laporte: granting <u>59</u> Stipulation. (shyS, COURT STAFF) (Filed on 8/1/2017) (Entered: 08/01/2017)</b>

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
8/2/17	<u>61</u>	OPPOSITION/RESPONSE (re <u>58</u> ADMINISTRATIVE MOTION Stay Pending Appeal re <u>54</u> Order) filed by Sierra Club, Inc.. (Super, Reed) (Filed on 8/2/2017) (Entered: 08/02/2017)
8/3/17	<u>62</u>	REPLY (re <u>58</u> ADMINISTRATIVE MOTION Stay Pending Appeal re <u>54</u> Order) filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 8/3/2017) (Entered: 08/03/2017)
8/3/17	<u>63</u>	Proposed Order re <u>58</u> ADMINISTRATIVE MOTION Stay Pending Appeal re <u>54</u> Order by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 8/3/2017) (Entered: 08/03/2017)
8/4/17	<u>64</u>	NOTICE OF APPEAL to the 9th Circuit Court of Appeals re <u>55</u> Judgment; filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Appeal fee FEE WAIVED.) (Attachments: # <u>1</u> Exhibit A, # <u>2</u> Exhibit B) (Garbers, Wendy) (Filed on 8/4/2017) Modified on 8/8/2017 (aaaS, COURT STAFF). (Additional attachment(s) added on

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		8/9/2017: # <u>3</u> USCA NUMBER 17-16560) (aaa, COURT STAFF). (Entered: 08/04/2017)
		* * * * *
8/10/17	<u>67</u>	<b>ORDER EXTENDING AUGUST 14, 2017 PRODUCTION DEADLINE TO AUGUST 24, 2017. Signed by Magistrate Judge Elizabeth D. Laporte on 8/10/17. (klhS, COURT STAFF) (Filed on 8/10/2017) (Entered: 08/10/2017)</b>
8/22/17	68	<b>Minute Entry for proceedings held on 8/22/2017 before Magistrate Judge Elizabeth D. Laporte regarding motion to stay. The production deadline is extended to 9/6/2017. The parties shall file a joint submission by 9/6/2017. The joint submission shall address the parties' respective positions regarding whether the requested stay should apply to the five documents identified by the Court during the hearing. In addition, the joint submission should address the 9th Circuit's standard for expediting appeal.</b> <b>FTR Time 1:50 - 2:06</b> <b>Plaintiff Attorneys: Katie Schaefer and Reed Super (telephonic appearance)</b>

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		<p><b>Defendant Attorney: Wendy Garbers</b></p> <p><b>This is a text-only Minute Entry (shyS, COURT STAFF) (Date Filed: 8/22/2017) (Entered: 08/23/2017)</b></p>
9/1/17	<u>69</u>	<p><b>STIPULATION WITH PROPOSED ORDER re <u>58</u> ADMINISTRATIVE MOTION Stay Pending Appeal re <u>54</u> Order, 68 Motion Hearing,, filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 9/1/2017) (Entered: 09/01/2017)</b></p>
9/5/17	<u>70</u>	<p><b>STIPULATION AND ORDER Re Stay Pending Appeal signed by Magistrate Judge Elizabeth D. Laporte: granting <u>69</u> Stipulation. (shyS, COURT STAFF) (Filed on 9/5/2017) (Entered: 09/05/2017)</b></p> <p>* * * * *</p>
9/26/17	<u>72</u>	<p>Transcript of Proceedings of the official sound recording held on 06/06/17, before Magistrate Judge Elizabeth D. Laporte. FTR/ Transcriber Echo Reporting, Inc., telephone number 8584537590. Tape Number: FTR 9:06 - 9:36. Per General Order No. 59 and Judicial Conference policy, this transcript</p>

DATE	DOCKET NUMBER	PROCEEDINGS
		<p>may be viewed only at the Clerk's Office public terminal or may be purchased through the Court Reporter/Transcriber until the deadline for the Release of Transcript Restriction. After that date it may be obtained through PACER. Any Notice of Intent to Request Redaction, if required, is due no later than 5 business days from date of filing. (Re <u>71</u> Transcript Order,) Redaction Request due 10/17/2017. Redacted Transcript Deadline set for 10/27/2017. Release of Transcript Restrictions set for 12/26/2017. (Related documents(s) <u>71</u>) (tgb, COURT STAFF) (Filed on 9/26/2017) (Entered: 09/26/2017)</p> <p>* * * * *</p>
2/1/19	<u>74</u>	<p>STIPULATION WITH PROPOSED ORDER filed by Fish and Wildlife Service, National Marine Fisheries Service. (Garbers, Wendy) (Filed on 2/1/2019) (Entered: 02/01/2019)</p>
2/4/19	<u>75</u>	<p><b>STIPULATION AND ORDER re Clarification of Stays Pending Appeal signed by Magistrate Judge Elizabeth D. Laporte: granting <u>74</u> Stipulation.</b> (shyS, COURT</p>

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		STAFF) (Filed on 2/4/2019) (Entered: 02/04/2019) * * * * *
6/4/19	<u>80</u>	STIPULATION WITH PROPOSED ORDER filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 6/4/2019) (Entered: 06/04/2019)
6/5/19	<u>81</u>	STIPULATION AND ORDER Re Deadlines signed by Magistrate Judge Elizabeth D. Laporte: granting <u>80</u> Stipulation. (shyS, COURT STAFF) (Filed on 6/5/2019) (Entered: 06/05/2019) * * * * *
6/17/19	<u>83</u>	STIPULATION WITH PROPOSED ORDER <i>Re Further Segregability Analysis</i> filed by National Marine Fisheries Service, United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 6/17/2019) (Entered: 06/17/2019) * * * * *
6/18/19	<u>85</u>	STIPULATION AND ORDER Re Further Segregability Analysis signed by Magistrate Judge Elizabeth D. Laporte: granting <u>83</u> Stipulation. (shyS, COURT STAFF)

<b>DATE</b>	<b>DOCKET NUMBER</b>	<b>PROCEEDINGS</b>
		(Filed on 6/18/2019) (Entered: 06/18/2019)
8/12/19	<u>86</u>	STIPULATION WITH PROPOSED ORDER filed by United States Fish and Wildlife Service. (Garbers, Wendy) (Filed on 8/12/2019) (Entered: 08/12/2019)
9/25/19	<u>87</u>	<b>ORDER Re Further Segregability Analysis signed by Magistrate Judge Elizabeth D. Laporte: granting <u>86</u> Stipulation. (shyS, COURT STAFF) (Filed on 8/12/2019) (Entered: 08/12/2019)</b>
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UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

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Case No. 15-cv-05872 EDL

SIERRA CLUB, INC., PLAINTIFF

*v.*

NATIONAL MARINE FISHERIES SERVICE AND UNITED  
STATES FISH AND WILDLIFE SERVICE, DEFENDANTS

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**DECLARATION OF SAMUEL D. RAUCH, III**

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I, Samuel D. Rauch, III, do hereby declare the following:

1. I am currently the Acting Assistant Administrator for the National Marine Fisheries Service (“NMFS”), a component of the National Oceanic and Atmospheric Administration (“NOAA”), and in 2012 and 2013 I also performed the duties and functions of the Assistant Administrator. Since 2006, I have served as the Deputy Assistant Administrator for Regulatory Programs for NMFS. In that capacity I oversee NMFS regulatory actions and programs. This includes consultations under the Endangered Species Act (“ESA”), 16 U.S.C. §§ 1531 et seq, on actions authorized, funded or carried out by Federal agencies, to assist the agencies in meeting their ESA Section 7(a)(2) obligation to insure that their actions are not likely to jeopardize species listed as threatened or endangered under the ESA and not likely to destroy or adversely modify critical habitat designated for those species. I make this declaration based on personal knowledge and information available



to me in my capacity as the Acting Assistant Administrator for NMFS and Deputy Assistant Administrator for Regulatory Programs for NMFS.

2. Prior to my roles as Acting Assistant Administrator and Deputy Assistant Administrator for Regulatory Programs, I served as the Assistant General Counsel for Fisheries, as head of the office providing legal counsel to NMFS. Previously, I served as a trial attorney and then Assistant Section Chief for the Wildlife and Marine Resources Section of the Environment and Natural Resources Division of the U.S. Department of Justice.

3. I hold a J.D. from the Northwestern School of Law of Lewis & Clark College, a M.S. from the University of Georgia, and a B.A. from the University of Virginia.

4. As required by Section 7(a)(2) of the ESA, the Environmental Protection Agency (“EPA”) consulted with NMFS and the US Fish and Wildlife Service (“FWS”) (collectively “the Services”) to insure that EPA’s regulation (“Regulation”) for cooling water intakes (“CWIS”), issued pursuant to Section 316(b) of the Clean Water Act, is not likely to jeopardize the continued existence of species listed as endangered or threatened under the ESA or to destroy or adversely modify their critical habitat. ESA Section 7(b)(3) requires that at the end of consultation one or both Services, depending on the species and habitat affected, provide a biological opinion on whether the action complies with the mandate of Section 7(a)(2). If the Services conclude that a proposed action will not comply with the Section 7(a)(2) standard, the Services include a reasonable and prudent alternative (“RPA”) that will allow the

action to proceed in compliance. If the Services conclude that the action will meet the Section 7(a)(2) standard, no RPA is required or included in the biological opinion. Pursuant to ESA Section 7(b)(4), the Services include in a biological opinion an incidental take statement (“ITS”) that specifies the impact to listed species, reasonable and prudent measures (“RPMs”) necessary or appropriate to minimize that impact, and terms and conditions (“T&Cs”) to implement the RPMs.

5. The consultation on EPA’s Regulation presented multiple complex and novel issues for all three agencies, NMFS, FWS and EPA. None of the agencies had previously participated in an ESA Section 7(a)(2) consultation on earlier EPA regulations implementing Section 316(b). During the almost two years of the consultation process, personnel from all three agencies met routinely, sometimes more than once a week. In addition to these meetings, there were multiple conference calls and many emails involving one, two or all three agencies. During the frank discussions over this lengthy period, multiple options for the Regulation and the biological opinion were considered, reconsidered, with most being rejected. Multiple pre-decisional drafts of the Regulation, the biological opinion, and portions of those documents, as well as briefing and options papers, were circulated intra- and interagency. Multiple comments and suggestions were exchanged, often by several people on the same document, and sometimes those comments and suggestions conflicted. Documents were revised on the author’s own initiative or in response to comments and then recirculated. NMFS and FWS generated many drafts of the biological opinion during that internal and interagency discussion. In addition, the Services for much of this time were each writing their own

separate opinions, but determined ultimately to issue a joint opinion.

6. At the conclusion of that consultation, on May 19, 2014, Donna Wieting, Director of NMFS Office of Protected Resources co-signed, with Paul Souza of FWS, Endangered Species Act Section 7 Consultation Programmatic Biological Opinion on the U.S. Environmental Protection Agency's Issuance and Implementation of the Final Regulations Section 316(b) of the Clean Water Act ("Opinion"). The Services concluded in the Opinion that EPA's issuance of the Regulation was not likely to jeopardize the continued existence of listed species or destroy or adversely modify their designated critical habitat. Although within NMFS the signing of biological opinions issued in NMFS headquarters is delegated to the Director of the Office of Protected Resources, I also participated in many meetings and conference calls, both internal and interagency, and reviewed the Opinion. I am personally familiar with the consultation and the issues that arose.

7. On August 11, 2014, Sierra Club filed a Freedom of Information Act ("FOIA") (5 U.S.C. § 552) request with NMFS. The request was extraordinarily broad and sought documents the vast majority of which are protected under the deliberative process privilege, attorney-client communication privilege, attorney work product, and FOIA (b)(5), and not subject to disclosure under FOIA:

- (1) All NMFS drafts of all or portions of the Endangered Species Act Section 7 Consultation Programmatic Biological Opinion on the U.S. Environmental Protection Agency's Issuance and Implementation of the Final Regulations Section 316(b) of the

Clean Water Act (the “BiOp”), Incidental Take Statement and its appendices;

(2) All documents exchanged between NMFS staff and within NOAA, and between NOAA/NMFS and the Environmental Protection Agency (EPA), or any other governmental agency or official, during interagency review of, and concerning, drafts of the BiOp and/or Incidental Take Statement;

(3) All documents between NMFS staff and within NOAA, and between NOAA/NMFS and EPA, or any other governmental agency or official, concerning the ESA section 7 consultation on EPA’s most recently proposed 316(b) rule;

(4) All documents serving as the basis for, or which were considered by, NOAA and/or NMFS in connection with its “no jeopardy” and/or “no adverse modification” of critical habitat findings on the ESA section 7 consultation for the most recently proposed 316(b) rule; including but not limited to: a) any and all data, documents, communications and records pertaining to all species of sturgeon, and any opinions by NMFS staff or others on potential impacts to sturgeon; b) any and all data, documents, communications and records of any type reflecting any changes to NMFS’ opinions or conclusions concerning its jeopardy determinations for sturgeon or any other species; c) any and all identification by NMFS of any requirements that would have to be met to avoid jeopardy findings for sturgeon or any other species, whether or not it was included in the final BiOp or Incidental Take Statement; d) any draft or proposed jeopardy opinion that was sent by NMFS to the U.S.

Fish and Wildlife Service, U.S. Environmental Protection Agency, or any other agency, for the sturgeon or any other species;

(5) If not otherwise produced in response to the sections above, all documents or communications of every type between NOAA and/or NMFS and the Office of Management and Budget and/or the Council on Environmental Quality, and any of the agencies' personnel, concerning the ESA section 7 consultation on the 316(b) rule, including but not limited to any records of telephone conversations, emails or meetings between the agencies or their personnel on this subject, any draft (full or partial) BiOp or Incidental Take Statements between NMFS, OMB and/or CEQ on this subject;

(6) If not otherwise produced in response to the sections above, all documents or communications of every type between NOAA and/or NMFS and the U.S. Fish and Wildlife Service, and any of the agencies' personnel, concerning the ESA section 7 consultation on the 316(b) Rule, including but not limited to: a) all communications between NMFS and the FWS with subject lines including the terms 316(b) or Cooling Water Intake; b) all communications between the Protected Resources Division of NMFS and Drew Crane at FWS

(7) All documents between NMFS staff and between NMFS and EPA, or any other governmental agency or official, concerning any ESA section 7 consultation on EPA's previously proposed 316(b) rule(s), including for new sources as well as existing sources;

(8) All documents exchanged and all documents related to any meetings, telephone conversations, emails, or any other communications between

and/or NMFS and the utility (i.e., electric generation) industry or manufacturing industry, representatives of the utility or manufacturing industries, trade groups, special interest groups, and/or other non-governmental parties relating to the ESA section 7 consultation on the 316(b) rule.”

8. In response, NMFS staff conducted an extremely broad search. NMFS staff queried 74 people from NOAA and NMFS who had worked in any capacity on the consultation for their responsive records. In addition, NMFS staff searched the electronic files of people who had worked on the project but who were no longer with NMFS. Ultimately, NMFS located 5,724 responsive documents. NMFS released 1,272 documents in full. I asserted the deliberative process privilege and released 1,536 documents with redactions of privileged and non-responsive text, and withheld in full 2,916 documents as privileged.

9. NMFS provided interim responses to this Sierra Club FOIA on March 3, August 3, September 10, November 2, and December 11, 2015, and February 4, February 22, and March 24, 2016. NMFS’ final response was sent April 6, 2016. NMFS released in full documents that were not subject to any privilege, redacted privileged portions of documents, and withheld privileged documents in full.

10. Of those documents, NMFS filed a privilege log for 1,090 of those documents in a separate litigation regarding this same documents. *Cooling Water Intake Structure Coalition et al. v. EPA et al*, No. 14-4645(L) and

consolidated cases 14-4657, 14-4659, 14-4664, 14-4667, and 14-4670 (2nd Circuit). Included among the drafts of the Opinion identified by Plaintiffs is Document 0.7.266.44516.1, a December 6, 2013 NMFS draft opinion, in which NMFS preliminarily concluded that EPA's draft of the Regulation in its then-current-form was likely to jeopardize listed species and destroy or adversely modify designated critical habitat. Originally, NMFS had agreed to share a draft of its opinion with EPA by December 6, 2013 and provide its final opinion by December 20, 2013. However, NMFS never sent this draft to EPA, because NMFS, FWS and EPA agreed that more work needed to be done, as EPA was still considering provisions in the draft Regulation. NMFS never issued its own opinion, and this document was never made final.

11. Because the Services preliminarily determined that the Regulation as then written may be likely to jeopardize listed species or destroy or adversely modify critical habitat, the Services also wrote a draft RPA. Pursuant to ESA Section 7(b)(3)(A), if the Services conclude that an agency action is likely to jeopardize listed species or destroy or adversely modify critical habitat, the Services must provide a RPA that would allow the action to proceed without that result. Document 0.7.266.44616.1 is one of the drafts of a possible RPA. Ultimately, based on changes to the Regulation, the Services' final conclusion, explained in the joint Opinion, was that the Regulation was not likely to jeopardize the continued existence of listed species or destroy or adversely modify their designated critical habitat. In light of this conclusion, no RPA was required and the Services did not include any in the Opinion.

12. When NMFS sends action agencies draft BOs that may be controversial, I occasionally review the draft document prior to its being transmitted. By providing a draft for transmission to another agency, NMFS is not rendering a final decision. The document remains a draft and is subject to change until final signature. The December 6, 2013, NMFS' draft opinion at issue here was clearly not final, as NMFS never issued a separate biological opinion, the final joint Opinion had substantial changes from NMFS' December 6, 2013 draft and reached an entirely different conclusion (i.e., no jeopardy). Moreover, NMFS never sent its December 6, 2013 draft at issue to EPA.

13. Central to this internal and deliberative process was the ability of all participants to have the candid and frank discussions that decision-makers must rely on in order to make sure all viewpoints and options are considered. I asserted the deliberative process privilege for these documents in the FOIA response and I continue to assert the privilege here because I do not want these communications to be in anyway discouraged or chilled for fear of disclosure. In addition, as some of these documents reflect positions that NMFS did not adopt, I do not want to create confusion with their release or to use NMFS' resources to defend those rejected positions.

14. Plaintiffs have identified twenty-four documents for which they challenge the withholding. Three of the documents—0.7.266.7026, 0.7.266.7055, 0.7.266.7066—are parts of an email chain. An identical passage in one of the three documents was unredacted, but redacted in the other two. I have instructed that the redactions of



this passage be removed in these two documents. Document 0.7.266.7026 has no remaining redactions and will be released to the plaintiffs in full, so is not discussed below. Document 0.7.266.7066 has remaining redactions, but a version without the inconsistent redactions will be provided to the plaintiffs. In addition, in the spirit of cooperation, I have instructed that Document 0.7.266.38030 be released in full. I provide additional detail on the twenty-two remaining documents below.

15. I withhold in full Document Number 0.7.266.44516.1 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). The document, sent via email by Jennifer Schultz of NMFS to herself on December 6, 2013, is a draft of the biological opinion written by NMFS. This early draft, written more than five months before the Services issued their joint Opinion, reflects a preliminary analysis of a late 2013 draft of EPA's Regulation. Because this draft discusses EPA's 2013 draft of the Regulation, the draft reflects EPA's deliberative process as well as that of NMFS. This preliminary analysis was not adopted and this draft was never sent to EPA. Ultimately, NMFS abandoned this draft and did not issue an opinion, instead co-signing the joint Opinion. Between December 6, 2013 and May 2014 EPA and the Services communicated frequently, sometimes daily, to discuss changes to EPA's Regulation. In their final joint Opinion, the Services concluded that EPA's issuance of the Regulation was not likely to jeopardize listed species or destroy or adversely modify designated critical habitat. This conclusion was based on EPA's final Regulation, which differed from EPA's 2013 draft. There are no segregable portions for release in this draft because a biological opinion is not a compilation of

data, but rather a detailed sifting and weighing of information to determine whether an action is likely to jeopardize listed species or destroy or adversely modify critical habitat and how to address uncertainty. The discussion of factual material in this document is generally intertwined with the analysis such that it is not possible to reveal the factual material without revealing the agency's preliminary analysis.

16. I withhold in full Document Number 0.7.266.44616.1 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This is a draft of a possible RPA sent via email from Rick Sayers of FWS to Jennifer Schultz of NMFS on December 17, 2013. Pursuant to the ESA Section 7(b)(3) (16 USC § 1536(b)(3)), the Services must provide a RPA, if any, whenever they determine that a federal agency action is likely to jeopardize listed species or destroy or adversely modify critical habitat. The RPA, if implemented, allows the agency action to proceed in compliance with ESA Section 7(a)(2)'s statutory requirement that Federal agencies must insure that actions they authorize, fund or carry out are not likely to jeopardize listed species or to destroy or adversely modify critical habitat. Because NMFS' preliminary analysis of EPA's draft of the Regulation, as it existed in 2013, was that it was likely to jeopardize listed species and destroy or adversely modify critical habitat, the Services were considering a draft RPA. This draft was shared between FWS and NMFS and reflects the agencies' deliberations on options for a possible RPA for EPA's 2013 draft of the Regulation. The draft includes various comments, questions, and tracked changes of NMFS agency staff, and the analysis is not complete or final. Because the Services in their final joint Opinion

concluded that EPA's action was not likely to jeopardize listed species or to destroy or adversely modify designated critical habitat, no RPA was necessary and the draft RPA was abandoned and never finalized. There are no segregable portions of this document. Because the Services include RPAs in biological opinions recommending actions for the action agency to take, factual material is included to provide the rationale for the recommendations, and it is therefore intertwined with the analysis documenting that the RPA will avoid likely jeopardy. Discussion of factual material, to the extent that it existed, is intertwined with the analysis such that it is not possible to reveal the factual material without revealing the agency's preliminary analysis.

17. I withhold in full document number 0.7.266.5427.1 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). The document is a NMFS' April 7, 2014 draft of the biological opinion, sent via email on April 7, 2014 from Jennifer Schultz of NMFS to Bridget Crokus, Colette Cairns and Jordan Carduner of NMFS, a draft that was not sent to EPA. Because the Services decided to issue a joint Opinion and because this draft reflected a version of EPA's Regulation that differed prior to the issuance of the final joint Opinion, this draft was abandoned and never finalized. There are no segregable portions for release in this draft because a biological opinion is not a compilation of data, but rather a preliminary narrative analyses based on weighing and sifting information and assigning value, as well as how to deal with uncertainty. Accordingly, the discussion of factual material in this document is intertwined with the analysis such that it is not possible to reveal the factual material without revealing the

agency's preliminary analysis. Because this preliminary draft was circulated for internal review and comment, the analysis and factual matters presented are not complete or final and may contain inaccuracies.

18. I withhold in full Document Number 0.7.266.5597.1 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This is a draft document which describes potential possible methods to minimize risk to abalone, provided as a first draft for comment among NMFS staff and sent via email on November 4, 2013 from Dan Lawson of NMFS to Jennifer Schultz of NMFS. These measures were considered for possible incorporation into the biological opinion, in a RPA, if NMFS were to conclude that the Regulation jeopardized listed species, or as possible T&Cs in an ITS. Ultimately, NMFS did not reach these conclusions in this manner but still included a later-refined version of the measures in the Opinion as Appendix D: Example of Species Specific Control Measures, Monitoring and Reporting. The draft document is a preliminary narrative analysis that reflects the agency's deliberations about what potential species-protective measures should be included in the biological opinion. The selection of topics and supporting information in the draft reflects the agency's decision-making process. The preliminary analysis and material presented are not complete/final and may contain various inaccuracies. There are no segregable portions of this document. The discussion of factual material in this document is generally intertwined with the analysis such that it is not possible to reveal the factual material without revealing the agency's preliminary analysis. Factual material is not merely compiled but is weighed and evaluated to determine what the proper protective

methodology, and therefore is intertwined with the analysis such that revealing it will also reveal the agency's preliminary analysis.

19. I withhold in its entirety Document Number 0.7.266.7196.1 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). The document, sent via email from Shelly Norton of NMFS to Kris Petersen of NMFS on April 24, 2014, is a draft of a recovery plan for Johnson's sea grass, a threatened plant species. The draft recovery plan, not yet final and not itself the subject of this FOIA request, is being developed to replace the existing Johnson's sea grass recovery plan issued in 2002. Ms. Norton provided the draft of the recovery plan to assist Ms. Petersen in writing Appendix C of the Opinion. The draft is a preliminary narrative analysis to be considered prior to a separate agency determination for inclusion in the recovery plan mandated by ESA Section 4(f), 16 USC § 1533(t). There are no segregable portions for release. The selection of topics and supporting information in the draft reflects the agency's decision-making process. The discussion of factual material cannot be revealed without also revealing the agency's preliminary analysis. The preliminary analysis and material presented are not complete/final and may contain various inaccuracies.

20. I withhold in its entirety Document Number 0.7.266.7544.2 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This document, sent from Jennifer Schultz of NMFS to Audra Livergood and other NMFS staff members on August 9, 2013, is a first draft of potential measures to be

included in the biological opinion to minimize risk to salmonids. These measures were considered for possible incorporation into the biological opinion, in a RPA, if NMFS were to conclude that the Regulation jeopardized listed species, or as possible T&Cs in an ITS. Ultimately, NMFS did not reach these conclusions in this manner but still included a later-refined version of the measures in the Opinion as Appendix D: Example of Species Specific Control Measures, Monitoring and Reporting. This first draft was circulated for the purpose of soliciting comments on those measures. The draft is a preliminary narrative analysis to be considered prior to the agency's determination of appropriate measures for inclusion in the biological opinion. There are no segregable portions of this document for release. The selection of topics and supporting information in the draft reflects the agency's decision-making process. The discussion of factual material cannot be revealed without also revealing the agency's preliminary analysis. The preliminary analysis and material presented are not complete/final and may contain various inaccuracies.

21. I withhold in its entirety Document Number 0.7.266.7544.3 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This document, also sent as an attachment to the same email discussed in the preceding paragraph from Jennifer Schultz of NMFS to Audra Livergood and others of NMFS on August 9, 2013, is a first draft of potential measures to include in the biological opinion to minimize risk to salmonids, larval fish, sea turtles, abalone, and corals. These measures were considered for possible incorporation into the biological opinion, in a RPA, if

NMFS were to conclude that the Regulation jeopardized listed species, or as possible T&Cs in an ITS. Ultimately, NMFS did not reach these conclusions in this manner but still included a later-refined version of the measures in the Opinion as Appendix D: Example of Species Specific Control Measures, Monitoring and Reporting. This first draft was circulated for the purpose of soliciting comments from NMFS staff, and was not circulated outside of NMFS. The draft is a preliminary narrative analysis to be considered prior to an agency determination of appropriate measures for inclusion in the biological opinion. The selection of topics and supporting information in the draft reflects the agency's decision-making process. The document also contains various comments and questions of agency staff, which reflect the internal deliberations and discussions during the course of reviewing this draft document. There are no segregable portions of this document for release. The discussion of factual material cannot be revealed without also revealing the agency's preliminary analysis. The preliminary analysis and material presented are not complete/final and may contain various inaccuracies.

22. I withhold in its entirety Document Number 0.7.266.37667 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This document is an undated draft document written during development of NMFS' draft opinion, describing possible protective measures for consideration in the biological opinion to minimize risk to sea turtles. These measures were considered for possible incorporation into the biological opinion, in a RPA, if NMFS were to conclude that the Regulation jeopardized listed species, or as possible T&Cs in an ITS. Ultimately,

NMFS did not reach these conclusions in this manner but still included a later-refined version of the measures in the Opinion as Appendix D: Example of Species Specific Control Measures, Monitoring and Reporting. The draft is a preliminary narrative analysis to be considered prior to an agency determination and consideration in the opinion. The selection of topics and supporting information in the draft reflects the agency's decision-making process. There are no segregable portions for release in this document. The discussion of factual material cannot be revealed without also revealing the agency's preliminary analysis. The preliminary analysis and material presented are not complete/final and may contain various inaccuracies.

23. I withhold in its entirety Document Number 0.7.266.37695 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). The document is an undated draft document, written during development of NMFS' draft opinion, describing possible protective measures for inclusion in the biological opinion to minimize risk for pinnipeds. These measures were considered for possible incorporation into the biological opinion, in a RPA, if NMFS were to conclude that the Regulation jeopardized listed species, or as possible T&Cs in an ITS. Ultimately, NMFS did not reach these conclusions in this manner but still included a later-refined version of the measures in the Opinion as Appendix D: Example of Species Specific Control Measures, Monitoring and Reporting. The draft is a preliminary narrative analysis to be considered prior to an agency determination and consideration in the opinion. The selection of topics and supporting information in the draft reflects the agency's decision-making process. The document also contains various



comments and questions of agency staff, which reflect the internal deliberations and discussions during the course of reviewing this draft document. There are no segregable portions for release. The discussion of factual material cannot be revealed without also revealing the agency's preliminary analysis. The preliminary analysis and material presented are not complete/final and may contain various inaccuracies.

24. I withhold in its entirety Document Number 0.7.266.45263.1 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). The document, sent via email from Jennifer Schultz of NMFS to David Nichols and others of NMFS on March 19, 2014, describes draft protective measures for inclusion in the biological opinion to minimize risk to sea turtles. These measures were considered for possible incorporation into the biological opinion, in a RPA, if NMFS were to conclude that the Regulation jeopardized listed species, or as possible T&Cs in an ITS. Ultimately, NMFS did not reach these conclusions in this manner but still included a later-refined version of the measures in the Opinion as Appendix D: Example of Species Specific Control Measures, Monitoring and Reporting. The purpose of sending this draft document is to seek comments from NMFS scientists on the draft protective measures for consideration in the biological opinion. The draft is a preliminary narrative analysis to be considered prior to an agency determination and consideration in the biological opinion. The selection of topics and supporting information in the draft reflects the agency's decision-making process. The document also contains various comments and questions of agency staff, which reflect the internal deliberations and discussions during the course of reviewing

this draft document. The document does not contain segregable portions for release. The discussion of factual material cannot be revealed without also revealing the agency's preliminary analysis. The preliminary analysis and material presented are not complete/final and may contain various inaccuracies.

25. I withhold in its entirety Document Number 0.7.266.45277.2 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). The document, sent from Patrick Opay of NMFS to Jennifer Schultz of NMFS on March 20, 2014 in response to an earlier internal email chain among Jennifer Schultz, David Nichols and Irene Kelly of NMFS, is a draft describing potential protective measures for inclusion in the biological opinion to minimize risk to sea turtles. These measures were considered for possible incorporation into the biological opinion, in a RPA, if NMFS were to conclude that the Regulation jeopardized listed species, or as possible T&Cs in an ITS. Ultimately, NMFS did not reach these conclusions in this manner but still included a later-refined version of the measures in the Opinion as Appendix D: Example of Species Specific Control Measures, Monitoring and Reporting. The draft was circulated to solicit comments from NMFS staff on these potential measures, and contains comments from NMFS staff written in the margins. The draft is a preliminary narrative analysis to be considered prior to an agency determination and consideration for inclusion in the opinion. The selection of topics and supporting information in the draft reflects the agency's decision-making process. The document also contains various comments and questions of agency staff, which reflect the internal deliberations and discussions during the course of reviewing this draft document. There are

no segregable portions of this document for release. The discussion of factual material cannot be revealed without also revealing the agency's preliminary analysis. The preliminary analysis and material presented are not complete/final and may contain various inaccuracies.

26. I withhold in part document number 0.7.266.5143 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). The document is an internal email thread from November 11 through November 14, 2013, among Jennifer Schultz of NMFS and Rich Domingue of NMFS and Mark Eames of NOAA's Office of General Counsel, discussing a separate ongoing consultation being done by staff from the Northwest Regional Office. While the information sought was for the purpose of writing the biological opinion that is the subject of this FOIA, the redacted portions of the document contain the agency's deliberations in preparation for developing and writing a separate biological opinion that has yet to be finalized and that is not the subject of this FOIA request. The redacted portions also contain NMFS headquarters and regional staff deliberative evaluation of possible options for implementation of the 2001 Memorandum of Agreement Between the Environmental Protection Agency, Fish and Wildlife Service and National Marine Fisheries Service Regarding Enhanced Coordination Under the Clean Water Act and Endangered Species Act (MOA), 36 FR 11202 (February 22, 2001). Section IX.A. of the MOA details coordination procedures between EPA and the Services for consideration of ESA concerns in issuance of state or tribal NPDES permits. In the preamble in the Federal Register notice announc-

ing the final Regulation, in the section titled EPA Oversight of State-Issued NPDES Permits To Protect Threatened and Endangered Species, EPA cited to and described these procedures in the MOA and stated that the MOA applies equally to NPDES permits that contain conditions for cooling water intake structures. 79 FR 48299, 48382-3 (August 15, 2014). The Opinion described EPA's oversight role as part of EPA's action. Opinion at 12-13. The discussion in this document contains thoughts and questions from agency staff in preparation for writing an early draft of the NMFS' draft opinion that was never finalized. This document has been segregated and non-deliberative or factual material has been released.

27. I withhold in its entirety Document Number 0.7.266.45161 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). The document is a one-paragraph email sent March 10, 2014 from Jennifer Schultz of NMFS to Angela Somma and Ron Dean of NMFS and George Noguchi of FWS discussing implementation of the 2001 MOA, for consideration in developing the biological opinion. This email reflects the agencies' internal deliberations during agency decision-making during development of the Opinion. The content of the email reveals the agency's preliminary analysis of potential agency action and topics/questions to be discussed. No segregation is possible for this document because all factual and non-deliberative material is interwoven with the analysis.

28. I withhold in its entirety Document Number 0.7.266.45161.1 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)).

The document, sent as an attachment to the email described in the paragraph above, discusses and evaluates various aspects of the implementation of the 2001 MOA. In addition to reflecting the agencies' deliberations in preparation for the Opinion at issue in this FOIA, the document also reflects the agencies' pre-decisional deliberations on state water quality standards under the Clean Water Act and individual state NPDES permits that are not the subject of this FOIA. This is a document consisting of agency staff's preliminary analysis, thoughts, proposals, and recommendations. This document was attached to be discussed during the course of decision-making by agency staff and was distributed for comments and review antecedent to agency action on the issue. The preliminary analysis and material presented are not complete/final and may contain various inaccuracies. No segregation is possible for this document because all factual and non-deliberative material is interwoven with the analysis.

29. I withhold in its entirety Document Number 07.266.45164 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)) for the reasons described in the two paragraphs above. The document is a March 10, 2014 email response from Angela Somma of NMFS to Documents Number 07.266.45161 and 07.266.45161.1. The content of the email reveals the agency's preliminary analysis of potential agency action and topics/questions to be discussed. No segregation is possible for this document because all factual and non-deliberative material is interwoven with the analysis.

30. I withhold in its entirety Document Number 0.7.266.61721 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This undated document, written during development of NMFS' draft opinion, is a draft table of possible quantified estimates of effects on listed species, based on the EPA's draft rule as it existed in 2013, a draft table that NMFS after further deliberations among its scientists ultimately determined not to include in the Opinion. This draft represents the agency's preliminary analysis and estimates. This document was generated as part of the agency's decision making regarding a biological opinion. Because the entire document represents draft views, no segregation is possible.

31. I withhold in its entirety Document Number 0.7.266.14973.1 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). The document, attached to a March 10, 2014 email from Jennifer Schultz of NMFS to Donna Wieting and Cathy Tortorici of NMFS, is an example of T&Cs for consideration in developing an ITS for this Opinion, from a draft biological opinion regarding a separate federal action, not the subject of this FOIA. At the time the draft was shared, the separate biological opinion had not been finalized. This document was created during the process of agency decision-making on the separate federal action, during the development of the biological opinion that is not the subject of this FOIA, and does not reflect the final determination of the agency with respect to that separate biological opinion. This document also contains comments and highlights which reveal the preliminary analysis of agency staff. The document contains no segregable portions for release. The discussion of factual material cannot be revealed without also

revealing the agency's preliminary analysis. The preliminary analysis and material presented are not complete/final.

32. I withhold in its entirety Document Number 0.7.266.17987.1 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This draft document, a duplicate of Document Number 0.7.266.61721, was sent as an attachment to an email from Jennifer Schultz of NMFS to Donna Wieting and Cathy Tortorici of NMFS. I withhold it for the same reasons discussed for Document Number 0.7.266.61721.

33. I withhold in part Document Number 0.7.266.7055 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This document is an email among Jennifer Schultz, Steve Thomas and Richard Wantuck of NMFS from March 12 through March 18, 2014 discussing requirements for fish screen monitoring and reporting as well as possible control measures for CWIS. This email chain is internal to NMFS agency staff and reflects the agency's deliberations during the course of drafting and evaluating a possible biological opinion. This discussion is antecedent to official agency action and consists of comments, questions, and thoughts of agency staff during the deliberative process. This document has been segregated and non-deliberative material has been released.

34. I withhold in part Document Number 0.7.266.7066 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This document is an email among Jennifer Schultz, Joe Dillon, Steve Thomas and other NMFS staff from March 12 through March 27, 2014, discussing possible

requirements for fish screen monitoring and reporting as well as possible control measures for CWIS. Possible options for the biological opinion are also sought. The document also contains an excerpt from EPA's draft Regulation that reflects EPA's deliberative process. This email chain is internal to NMFS agency staff and reflects the agency's deliberations during the course of drafting and evaluating a possible biological opinion as well as including excerpts from an EPA pre-decisional deliberative draft. This discussion is antecedent to official agency action and consists of comments, questions, and thoughts of agency staff during the deliberative process. This document has been segregated and non-deliberative material has been released.

35. I withhold in its entirety Document Number 0.7.266.37253 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)). This August 7, 2013 email from Bryan Nordlund of NMFS to Rich Domingue of NMFS is a NMFS internal memorandum that discusses the intake screens assessment based on evaluation of one facility, for purposes of developing the biological opinion for that facility. That biological opinion, that is not the subject of this FOIA, has not been finalized. This document reflects the agency's internal preliminary analysis, assessments, and recommendations during the course of decision-making for that separate biological opinion. The factual material cannot be revealed without also revealing the agency's preliminary analysis and no segregation is possible.

36. I withhold part of Document Number 0.7.266.5038 pursuant to the deliberative process privilege of FOIA exemption (b)(5) (5 U.S.C. § 552(b)(5)).



The document is an internal NMFS-only email chain from August 9, 2013, to August 27, 2013, among Jennifer Schultz and Colette Cairns, NMFS headquarters staff with the lead on preparing the biological opinion, and Ryan Hendren, a NMFS biologist in NMFS Southeast Regional Office in St. Petersburg, Florida. This email was generated early in the preparation of the biological opinion and for the purpose of writing and evaluating possible options for the biological opinion. The redacted portions contain the agency's deliberations in discussions and comments on issues related to EPA's delegation of authority to states and possible methods to minimize adverse effects to federally-listed species. This discussion is antecedent to official agency action and consists of comments, questions, and thoughts of agency staff during the deliberative process. This document has been segregated and non-deliberative material has been released.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed this [10] day of Feb. 2017.

/s/ SAMUEL D. RAUCH, III  
SAMUEL D. RAUCH, III  
Acting Assistant Administrator, NMFS

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

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Case No. 15-cv-05872 EDL

SIERRA CLUB, INC., PLAINTIFF

*v.*

NATIONAL MARINE FISHERIES SERVICE AND UNITED  
STATES FISH AND WILDLIFE SERVICE, DEFENDANTS

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**DECLARATION OF GARY FRAZER**

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I, Gary Frazer, hereby declare as follows:

1. I am the Assistant Director for Ecological Services of the U.S. Fish and Wildlife Service (“FWS”), an agency of the U.S. Department of the Interior (“DOI”), located in Washington, D.C. In my capacity as Assistant Director, I am responsible to the Director of the FWS and the Secretary of the Interior for the administration of the Endangered Species Act (“ESA” or “Act”), 16 U.S.C. §§ 1531-1544, which includes oversight and management of national programmatic consultations on Federal agency actions that are conducted by my Ecological Services’ program staff at FWS’s Headquarters Office.

2. I make this declaration based upon my personal knowledge and information available to me in my capacity as the Assistant Director for Ecological Services of FWS.

3. On May 19, 2014, Paul Souza, Deputy Assistant Director for Ecological Services at the time, signed, in

my capacity, the FWS and National Marine Fisheries Service's ("NMFS") joint biological opinion on the U.S. Environmental Protection Agency's ("EPA") issuance and implementation of the final regulations implementing section 316(b) of the Clean Water Act. In the joint biological opinion, the FWS and NMFS (collectively, the "Services") concluded that EPA's promulgation of the regulations is not likely to jeopardize the continued existence of ESA-listed species and is not likely to destroy or adversely modify designated critical habitat. In reaching this conclusion regarding EPA's compliance under section 7(a)(2) of the ESA, the Ecological Services Program staff at FWS Headquarters conducted a programmatic consultation on the 316(b) final rule, focusing primarily on required elements of the regulatory process set forth in the rule and on EPA's commitment to oversee implementation of the rule.

4. Before the joint biological opinion was issued, the Services engaged in an intensive consultation process with EPA involving not only scientific issues regarding the effects of EPA's action, but issues of legal and policy relevance regarding EPA's authority and discretion and the FWS's consideration of such in the consultation. In fact, given the agency action being analyzed was a rulemaking to implement a permitting program carried out by EPA or States approved by EPA under the National Pollutant Discharge Elimination System, this programmatic biological opinion was necessarily laden with significant policy and legal considerations under both the ESA and the Clean Water Act, even more so than what may be expected in a traditional, site-specific consultation.

5. In the nearly two years leading up to the issuance of the opinion, agency personnel met routinely, both in person and over the phone, and exchanged thousands of emails. The Services, along with EPA, participated in frank discussions over this period, and multiple options for EPA's regulation and the biological opinion were considered and reconsidered, with many rejected. Multiple pre-decisional drafts of the biological opinion, portions of the biological opinion, as well as briefing and options papers were circulated intra- and interagency. Multiple comments and suggestions were exchanged, often by several people on the same document, and sometimes those comments and suggestions conflicted. Documents were revised on the author's own initiative or in response to comments and recirculated.

6. The Services generated many pre-decisional drafts of the biological opinion, most not changing significantly between these versions. Included among the pre-decisional drafts of the biological opinion identified in Exhibit A, attached hereto, are drafts from December 6, 2013 and December 9, 2013, in which the FWS concluded that the EPA's regulation in its then-current-form was likely to jeopardize listed species and adversely modify critical habitat. These pre-decisional draft biological opinions were subject to internal review within FWS and the Department of the Interior and consultation with the EPA. Based upon this internal review and interagency review in December, the FWS concluded that additional consultation was needed to better understand and consider the operation of key elements of EPA's rule, the elements of which were still being deliberated within EPA as well. Therefore, these December 6 and December 9 draft opinions were never signed by me and distributed to EPA as the

agency's official preliminary position. In fact, the FWS, NMFS, and the EPA all agreed, that more work needed to be done and agreed to extend the time frame for the consultation. Because the Services preliminarily believed that the regulation, as then written, may be likely to jeopardize listed species or destroy or adversely modify critical habitat, the Services also wrote draft RPAs as required by ESA Section 7. Ultimately, based on changes to the regulation, the Services' final conclusion was that the regulation was not likely to jeopardize the continued existence of listed species nor likely to destroy or adversely modify critical habitat. Thus, no RPAs were required, and the Services did not include any in the final biological opinion.

7. I am personally familiar with this consultation and the legal and policy issues that were considered by the FWS Headquarters Ecological Services Program staff in rendering its biological opinion. I was involved in the decision-making process at FWS Headquarters, participating in internal discussions with mid-level managers in the Ecological Services Program Office, which included Rick Sayers, Chief of the Division of Environmental Review, and Patrice Ashfield, Chief of the Branch of Consultation and Habitat Conservation Planning, as well as the staff biologist who served as FWS's primary author of the biological opinion, Drew Crane. I also participated in interagency discussions among FWS staff and agency officials at DOI, the DOI's Office of the Solicitor, NMFS, NOAA's General Counsel's Office, EPA, EPA's Office of General Counsel, the Office of Management and Budget, and the United States Department of Justice.

**Sierra Club's FOIA Request**

8. On August 11, 2014, Sierra Club, Inc. (the "Plaintiff"), submitted a FOIA request to FWS. Specifically this request sought:

(1) All FWS drafts of all or portions of the Endangered Species Act (ESA) Section 7 Consultation Programmatic Biological Opinion on the U.S. Environmental Protection Agency's Issuance and Implementation of the Final Regulations Section 316(b) of the Clean Water Act (the "BiOp"), Incidental Take Statement and its appendices;

(2) All documents exchanged between FWS staff and between FWS and the Environmental Protection Agency (EPA), or any other governmental agency or official, during interagency review of, and concerning, drafts of the BiOp and/or Incidental Take Statement;

(3) All documents between FWS staff and between FWS and EPA, or any other governmental agency or official, concerning the ESA section 7 consultation on EPA's most recent 316(b) rule;

(4) All documents serving as the basis for, or which were considered by, the FWS in connection with its "no jeopardy" and/or "no adverse modification" of critical habitat findings on the ESA section 7 consultation for the most recently proposed 316(b) rule;

(5) All documents between FWS staff and between FWS and EPA, or any other governmental agency or official, concerning any ESA section 7 consultation on EPA's previously proposed 316(b) rule(s), including for new sources as well as existing sources; and

(6) All documents exchanged and all documents related to any meetings, telephone conversations, emails, or any other communications between FWS and the utility (i.e., electric generation) industry or manufacturing industry, representatives of the utility or manufacturing industries, trade groups, special interest groups, and/or other non-governmental parties relating to the ESA section 7 consultation and the 316(b) rule,”

9. Accordingly, FWS conducted a broad search in locating the documents that were potentially responsive to the FOIA request. FWS’s search for documents responsive to the FOIA request involved extensive queries of FWS staff who worked on the consultation, as well as a search of the electronic files of staff, including those who worked on the project, but were no longer with FWS.

10. Through this extensive search, FWS ultimately located 2,194 documents that were responsive to Sierra Club’s FOIA request. FWS provided interim responses to the FOIA request on March 10, March 26, June 22, August 14, October 19, October 30, November 23, December 1, and December 24, 2015; and January 8, 2016. In sum, FWS’s complete response to the FOIA request consisted of 624 documents released in full and that were not privileged, 347 documents released with redactions of privileged and non-responsive text, 1,075 documents withheld in full as privileged, while 148 documents were referred to NOAA and EPA for release determination as those records originated from those agencies.

### **FWS's Privilege Log**

11. In the Second Circuit Court of Appeals, the FWS, along with other defendants, is a party to litigation related to the biological opinion in *Cooling Water Intake Structure Coalition, et. al., v. United States Environmental Protection Agency, et. al.*, Case No. 14-4645(L) (2nd Cir. 2016) (the "Second Circuit Action"). The Plaintiff in this present case before this Court, Sierra Club, is also a plaintiff in the Second Circuit Action.

12. As a part of the Second Circuit Action, on July 13, 2015, FWS filed an administrative record for FWS's biological opinion. This administrative record was created by FWS staff, and the DOI Office of the Solicitor reviewed, again, the documents responsive to Sierra Club's broad FOIA request.

13. On February 24, 2016, the Second Circuit motions panel partially granted a Motion to Compel, ordering FWS (along with other Federal Agencies), to produce a privilege log. In response to the Second Circuit's order, on April 20, 2016, FWS filed a privilege log in the Second Circuit Action, which I reviewed and also signed a supporting declaration.

### **The Assertion of the FOIA's Deliberative Process Privilege**

14. FWS and the Plaintiff have used the privilege log in the Second Circuit Action as a basis to identify documents which are the subject of this briefing. FWS provided additional detail on many documents that the Plaintiff identified as potentially responsive. In return, Plaintiff narrowed the list of documents subject to this briefing. Ultimately, following further conversations, the Plaintiffs narrowed the list of documents



sought from FWS to five, numbered 243, 252, 279, 308 and 555 in the privilege log in the Second Circuit Action, along with “any other portions of the draft biological opinion that were delivered to EPA during the consultation process” (collectively the “Narrowed Documents” and each a “Narrowed Document”). The Narrowed Documents are the basis for the FWS’s *Vaughn* Index, attached hereto as Exhibit A.

15. In asserting the deliberative process privilege with respect to the Narrowed Documents, FWS sought to limit its claim of privilege to those documents that are deliberative, the release of which would harm the important government interest in the quality of administrative decision-making on a consultation of nationwide significance. The documents withheld under the deliberative process privilege involve candid discussions among staff at FWS and NMFS, and are reflective or pre-decisional opinions of EPA staff.

16. The documents withheld as subject to the deliberative process privilege are all pre-decisional working drafts of the biological opinion (or sections of drafts) that may also include redlined comments from various biologists and staff members.

17. If the candid views of staff contained in the Narrowed Documents were disclosed, the quality of future internal deliberations on resource issues would suffer. The working drafts of the biological opinion and the rulemaking contain comments from personnel on legal or policy matters related to a complex consultation of national significance. In my view, FWS personnel may hesitate to provide their frank and forthright opinions and recommendations on these draft documents based on fears that candid recommendations would be broadcast

outside the executive branch and misunderstood outside of context. I believe that this material, if disclosed, would significantly and adversely impair the integrity and quality of the decision making process for future FWS consultations.

18. These documents are an essential part of the deliberative process in that the authors of the documents make recommendations or express opinions on legal or policy matters related to the consultation. They include candid internal discussions relating to various options deliberated among the Ecological Services Program's staff and mid-level managers for the consultation. They include recommendations from Program staff members and lower level managers to individuals with decision-making authority. The *Vaughn* Index consists of documents containing legal or policy recommendations and opinions developed by Program staff and mid-level managers with respect to the consultation and implementation of the regulatory processes set forth in the 316(b) rulemaking.

19. In determining which documents were potentially subject to the deliberative process privilege, FWS has applied the following principles: (1) the privilege protects from disclosure only those documents that reflect advisory opinions, recommendations, and deliberations comprising part of a process by which government decisions are made or policies are formulated; (2) withheld material must be opinion, deliberation, advice, recommendation, or evaluation by those responsible for advising on the advantages and disadvantages of proposed agency decision or policy; (3) withheld material must be directed toward formulation of a policy or decision being debated within the agency at the time; and (4) withheld

material must be pre-decisional, must contain advice or recommendations, and must not merely comment upon already established policy. To the extent that any factual or non-privileged material is being withheld, I believe that it is so intertwined with privileged information that the factual information cannot be released without releasing privileged information as well. To the best of my knowledge, such factual information generally is available from other documents which were included in the administrative record of the Second Circuit Action or in unredacted portions of documents subject to the FOIA.

20. I have determined that, to the best of my knowledge, the documents identified in the *Vaughn* Index as subject to the deliberative process privilege should be protected from release by this privilege. By this declaration, therefore, I formally claim the deliberative process privilege for all documents so identified in FWS's *Vaughn* Index.

#### **The Narrowed Documents**

21. Given the Plaintiffs' reduction in the number of the documents at issue for the purposes of this litigation, I will address each Narrowed Document below, but the reasoning above is incorporated herein by reference.

22. Document 243 is a full draft biological opinion shared between two FWS employees, Drew Crane and Rick Sayers, which incorporates edits made by myself. This revised draft was predecisional and includes edits in track changes throughout the document. It is my opinion that this document is an essential part of the deliberative process in that the authors of the document make recommendations or express opinions on legal or policy matters related to the consultation. It reflects

candid internal discussions relating to various options deliberated among the Ecological Services Program's staff and mid-level managers for the consultation. This includes recommendations from Program staff members and lower level managers to individuals with decision-making authority.

23. Document 243 does not contain sections that are segregable. The draft opinion is not a compilation of data, but is a preliminary narrative analysis regarding the subject matter of the opinion that was ultimately issued. Even the parts of the document which do not directly include track changes or notations could be used to shed light on FWS's thinking and discussions at the time the document was drafted. The preliminary conclusions and preliminary inputs discussed in the documents reflect only the preliminary thinking of the FWS at the time of the draft, and changed significantly by the end of the process. The discussion of factual material in the document is generally intertwined with the analysis such that it is not possible to reveal any factual material without revealing the Services' preliminary analysis and assumptions. Because this is an early draft circulated for internal review and comment, the analysis and factual matters presented are not final and may contain inaccuracies.

24. Document 252 is a full draft biological opinion shared between two FWS employees, Drew Crane and myself, which incorporates previous edits made by the FWS team. This revised draft was predecisional. It is my opinion that this document is an essential part of the deliberative process in that the authors of the document make recommendations or express opinions on legal or policy matters related to the consultation. It

reflects candid internal discussions relating to various options deliberated among the Ecological Services Program's staff and mid-level managers for the consultation. This includes recommendations from Program staff members and lower level managers to individuals with decision-making authority.

25. Document 252 does not contain sections that are segregable. The draft opinion is not a compilation of data, but is a preliminary narrative analysis regarding the subject matter of the opinion that was ultimately issued. Even the parts of the document which do not directly reference the RPAs could be used to shed light on FWS's thinking and discussions at the time the document was drafted. The preliminary conclusions and preliminary inputs discussed in the documents reflect only the preliminary thinking of the FWS at the time of the draft, and changed significantly by the end of the process. The discussion of factual material in the document is generally intertwined with the analysis such that it is not possible to reveal any factual material without revealing the Services' preliminary analysis and assumptions. Because this is an early draft circulated for internal review and comment, the analysis and factual matters presented are not final and may contain inaccuracies.

26. Document 279 is a portion of the biological opinion known as a reasonable and prudent alternative section shared between one FWS employee, Drew Crane, and one employee of NMFS, Jennifer Schultz, which incorporates previous edits made by the FWS team. This revised draft was predecisional. It is my opinion that this document is an essential part of the deliberative

process in that the authors of the document make recommendations or express opinions on legal or policy matters related to the consultation. It reflects candid internal discussions relating to various options deliberated among the Ecological Services Program's staff and mid-level managers for the consultation. This includes recommendations from Program staff members and lower level managers to individuals with decision-making authority.

27. Document 279 does not contain sections that are segregable. It is a brief section of the biological opinion which was fully excised from the final and public biological opinion. There is no way to release the document without undermining the deliberative process between members of the FWS internally, as well as between staff of FWS, NMFS, and EPA.

28. Document 308 is a portion of the biological opinion, known as a reasonable and prudent alternative section, that was shared between Rick Sayers, Patrice Ashfield, and Drew Crane of FWS with NMFS, and also incorporates previous edits made by the FWS team. This revised draft was predecisional. It is my opinion that this document is an essential part of the deliberative process in that the authors of the document make recommendations or express opinions on legal or policy matters related to the consultation. It reflects candid internal discussions relating to various options deliberated among the Ecological Services Program's staff and mid-level managers for the consultation. This includes recommendations from Program staff members and lower level managers to individuals with decision-making authority.

29. Document 308 does not contain sections that are segregable. It is a brief section of the biological opinion which was fully excised from the final and public biological opinion. There is no way to release the document without undermining the deliberative process between members of the FWS internally, as well as between FWS, NMFS, and EPA.

30. Document 555 is a portion of the biological opinion, known as a reasonable and prudent alternative section and shared between FWS and NMFS and also incorporates previous edits made by the FWS team. This revised draft was predecisional. It is my opinion that this document is an essential part of the deliberative process in that the authors of the document make recommendations or express opinions on legal or policy matters related to the consultation. It reflects candid internal discussions relating to various options deliberated among the Ecological Services Program's staff and mid-level managers for the consultation. This includes recommendations from Program staff members and lower-level managers to individuals with decision-making authority.

31. Document 555 does not contain sections that are segregable. It is a brief section of the biological opinion which was fully excised from the final and public biological opinion. There is no way to release the document without undermining the deliberative process between members of the FWS internally, as well as between FWS, NMFS, and EPA.

This declaration is made under the provision of Section 1746 of Title 28 of the United States Civil Code. I declare under penalty of perjury that the foregoing is true

and correct to the best of my knowledge. Executed on  
Feb. [10], 2016 in Washington, D.C.

/s/ GARY FRAZER  
GARY FRAZER



**EXHIBIT A**

Doc#	# of Pages	Date	Author	Addressee	Document Type	Description	Status	Priv Applied
243	71	12/6/2013	Drew Crane, FWS	Rick Sayers, FWS	Document	<p>Predeliberational revised draft biological opinion drafted by FWS staff incorporates edits by the Assistant Director - Ecological Services. The release of this draft would harm future executive decisionmaking because staff would be less inclined to have a candid exchange of ideas on policy matters and would create public confusion from the disclosure of a draft biological opinion that was not adopted nor even submitted to EPA.</p> <p>Predeliberational draft biological opinion prepared by FWS staff and provided to FWS managers for internal agency review only. The release of this draft would harm future executive decisionmaking because staff would be less inclined to have a candid exchange of ideas on policy matters and would create public confusion from the disclosure of a draft biological opinion that was never adopted nor submitted to EPA.</p>	Withheld in Full	DP
252	72	12/9/2013	Drew Crane, FWS	Gary Frazer, FWS	Document	<p>Predeliberational revised portions of the biological opinion drafted by staff from FWS and NMFS. This document is part of a deliberative process between FWS and NMFS. The release of this document would harm future executive decisionmaking because staff would be less inclined to have a candid exchange of ideas on policy matters and would create public confusion from the disclosure of recommendations concerning a complex, nationwide regulatory program that were never adopted.</p>	Withheld in Full	DP
279	4	12/17/2013	Jennifer Schmitz, NMFS	Rick Sayers, FWS	Document	<p>Predeliberational revised draft portion of the biological opinion drafted by staff from FWS and NMFS. This document is part of a deliberative process between FWS and NMFS. This draft contains revisions provided by NMFS staff for FWS review. The release of this document would create public confusion from the disclosure of recommendations concerning a complex, nationwide regulatory program that were never adopted.</p>	Withheld in Full	DP
308	3	12/18/2013	NMFS	Rick Sayers, Patrice Ashfield, Drew Crane, FWS	Attachment	<p>Draft portions of the biological opinion provided by FWS to NMFS staff to contribute to an ongoing deliberative discussion on the 316(b) consultation. The release of this document would harm future executive decisionmaking because staff would be less inclined to have a candid exchange of ideas on policy and legal matters and would create public confusion from the disclosure of recommendations concerning a complex, nationwide regulatory program that were never adopted.</p>	Withheld in Full	DP
555	2	3/6/2014	FWS	NMFS	Document	<p>Draft portions of the biological opinion provided by FWS to NMFS staff to contribute to an ongoing deliberative discussion on the 316(b) consultation. The release of this document would harm future executive decisionmaking because staff would be less inclined to have a candid exchange of ideas on policy and legal matters and would create public confusion from the disclosure of recommendations concerning a complex, nationwide regulatory program that were never adopted.</p>	Withheld in Full	DP

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA

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Case No. 15-cv-05872-EDL

SIERRA CLUB, INC., PLAINTIFF

*v.*

NATIONAL MARINE FISHERIES SERVICE AND UNITED  
STATES FISH AND WILDLIFE SERVICE, DEFENDANT

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Mar. 22, 2015

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**AMENDED COMPLAINT FOR DECLARATORY  
AND INJUNCTIVE RELIEF**  
(Freedom of Information Act, 5 U.S.C. § 552 *et seq.*)

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SIERRA CLUB, INC. (hereinafter “Sierra Club”),  
by and through its undersigned counsel, hereby alleges:

**I. NATURE OF THE CASE**

1. Plaintiff asserts violations of the Freedom of Information Act (“FOIA”), 5 U.S.C. § 552, by Defendants National Marine Fisheries Service (“NMFS”), a federal agency situated within the United States Department of Commerce, and Fish and Wildlife Service (“FWS”), a federal agency situated within the Department of the Interior (collectively “Defendants”). Defendants have failed to produce records that Sierra Club sought in two FOIA requests on August 11, 2014.

2. Sierra Club’s FOIA requests concern a formal consultation (hereinafter, the “ESA Consultation”) undertaken by NMFS and FWS under the Endangered

Species Act (“ESA”) with respect to regulations promulgated by the U.S. Environmental Protection Agency (“EPA”) under Section 316(b) of the Clean Water Act (hereinafter, the “316(b) Rule”). Section 316(b) requires regulatory standards to minimize the adverse environmental impacts on fish and wildlife caused by cooling water intake structures at existing power plants and other industrial facilities.

3. Industrial cooling water systems are, by far, the largest source of water withdrawals in the United States, drawing trillions of gallons per year from America’s rivers, lakes, and oceans. The enormous volume and force of these water withdrawals kills and injures billions of fish and other aquatic organisms each year, including many federally-listed threatened and endangered species, and damages the broader ecosystem.

4. More than 16 months after receiving the FOIA request, and long past FOIA’s statutory deadline, NMFS has still not completed its production of responsive documents. NMFS has repeatedly unilaterally extended its estimated date of completion. Further, NMFS’s interim productions have withheld records that Sierra Club contends it is entitled to under FOIA.

5. On January 8, 2016, FWS completed its response to Sierra Club’s FOIA request. FWS partially denied Sierra Club’s FOIA request by redacting and withholding responsive documents. Sierra Club timely filed an administrative appeal of the partial denial of its FOIA request. However, FWS missed the statutory deadline for responding to Sierra Club’s appeal.

6. As a result of Defendants’ failures, Sierra Club is being deprived of critical information regarding the government’s development of the 316(b) Rule and the

measures for protecting threatened and endangered species from intake structures.

## **II. JURISDICTION, VENUE, AND INTRADISTRICT ASSIGNMENT**

7. This Court has jurisdiction “to enjoin the agency from withholding agency records and to order the production of any agency records improperly withheld from the complainant.” 5 U.S.C. § 552(a)(4)(B).

8. Venue is proper in this District because Plaintiff’s principal places of business are located in this District. 5 U.S.C. § 552(a)(4)(B).

9. Pursuant to Civil Local Rule 3-2(c), assignment to the San Francisco Division is appropriate because Plaintiff Sierra Club is incorporated in California and resides and maintains its headquarters in San Francisco County.

## **III. PARTIES**

10. Plaintiff Sierra Club was founded in 1892 and is the nation’s oldest grass-roots environmental organization. The Sierra Club is a national nonprofit organization that is incorporated in California and has its headquarters in San Francisco, California. It has more than one million members and supporters, including thousands of members in California. The Sierra Club is dedicated to the protection and preservation of the natural and human environment, including protecting threatened and endangered species and their habitat. The Sierra Club’s purpose is to explore, enjoy and protect the wild places of the earth; to practice and promote the responsible use of the earth’s ecosystem and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments.

11. Defendant National Marine Fisheries Service, also known as “NOAA Fisheries” is a federal agency within the National Oceanic and Atmospheric Administration within the United States Department of Commerce, which is subject to the requirements of FOIA and has possession or control of records that Plaintiff seeks in this action.

12. Defendant United States Fish and Wildlife Service is a federal agency within the Department of the Interior, which is subject to the requirements of FOIA and has possession or control of records that plaintiff seeks in this action.

#### **IV. STATUTORY AND REGULATORY BACKGROUND**

13. “The basic purpose of FOIA is to ensure an informed citizenry, vital to the functioning of a democratic society, needed to check against corruption and to hold the governors accountable to the governed.” *NRLB v. Robbins Tire & Rubber Co.*, 437 U.S. 214, 242 (1978). In other words, as the Supreme Court has declared, “FOIA is often explained as a means for citizens to know what the Government is up to.” *Nat’l Archive & Records Admin. v. Favish*, 541 U.S. 157, 171 (2004) (internal quotations and citations omitted).

14. In particular, FOIA requires agencies of the federal government to release, upon request, information to the public, unless one of nine specific statutory exemptions applies. 5 U.S.C. § 552(a)(3)(A). These exemptions are narrowly construed, and the agency bears the burden of establishing the applicability of each exemption as to each document for which it is claimed.

15. Upon receiving a FOIA request, an agency has twenty business days to respond by determining whether responsive documents exist and whether the agency will release them. 5 U.S.C. § 552(a)(6)(A).

16. FOIA allows an agency to delay an initial response for ten business days—but only ten business days—past the statutory deadline, if the agency can demonstrate that it faces “unusual circumstances” in responding to the request. 5 U.S.C. § 552(a)(6)(B). “Unusual circumstances” include the need to search for and collect requested documents from other offices, the need to appropriately examine a voluminous amount of separate and distinct records, and the need to consult with another agency. 5 U.S.C. § 552(a)(6)(B)(iii)(I-III). Even under “unusual circumstances,” however, an agency must provide notice of the delay and also provide “the date on which a determination is expected to be dispatched.” 5 U.S.C. § 552(a)(6)(B)(i).

17. The agency must provide information about the status of the request including “an estimated date on which the agency will complete action on the request.” 5 U.S.C. § 552(a)(7)(B)(ii). This date and other information about the status of the request must be available through a telephonic line or internet service established by the agency. *Id.*

18. When an agency denies, in whole or in part, a request for records under FOIA, the agency must make a “reasonable effort to estimate the volume of any requested matter the provision of which is denied, and shall provide any such estimate to the person making the request.” 5 U.S.C. § 552(a)(6)(F).

19. When an agency denies, in whole or in part, a request for records under FOIA, the agency must inform

the requesting party of the right “to appeal to the head of the agency any adverse determination.” 5 U.S.C. § 552(a)(6)(A)(i). The agency must make a determination with respect to any appeal within twenty business days (excluding holidays). 5 U.S.C. § 552(a)(6)(A)(ii).

20. FOIA expressly provides that a requester “shall be deemed to have exhausted his administrative remedies . . . if the agency fails to comply with the applicable time limit provisions” governing its response to a FOIA request or an appeal. 5 U.S.C. § 552(a)(6)(C).

## V. STATEMENT OF FACTS

### A. Cooling Water Intake Structures Kill Billions of Fish Every Year.

21. Power plants and other industrial facilities use cooling water intake structures to withdraw massive volumes of water for cooling. Collectively, the nation’s industrial cooling systems withdraw more water than is used for municipal water supplies and irrigated agriculture combined.

22. The largest plants in the country can draw enough water from a river to fill an Olympic swimming pool in less than 30 seconds. It is no wonder, then, that every year, hundreds of billions of juvenile fish, larvae, eggs and other aquatic organisms — including the young of many threatened and endangered species — are trapped and killed by the incredibly powerful pumps at such facilities.

23. The withdrawal of cooling from natural water bodies causes multiple types of undesirable adverse environmental impacts, including but not limited to



entrainment<sup>1</sup> and impingement;<sup>2</sup> reductions of threatened, endangered or other protected species; damage to critical aquatic organisms, including important elements of the food chain; diminishment of fish population's compensatory reserve; losses to populations including reductions of indigenous species populations and commercial and recreational fishery stocks; and stresses to overall communities and ecosystems.

24. By EPA's highly conservative estimates, industrial cooling water withdrawals annually result in the death of at least 2.2 billion age one-equivalent fish, crabs, and shrimp, and a minimum of 528 billion eggs and larvae that serve as the basis of the aquatic food chain. In many cases, the toll on fisheries by power plants rivals or exceeds that of the fishing industry. These withdrawals also destroy individuals from at least 266 federally-listed threatened and endangered species, and adversely impact the designated critical habitat of certain protected species.

25. "The environmental impact of these systems is staggering: A single power plant might impinge a million adult fish in just a three-week period, or entrain some 3 to 4 billion smaller fish and shellfish in a year, destabilizing wildlife populations in the surrounding

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<sup>1</sup> *Entrainment* refers to the extracting of fish eggs and larvae and other small organisms from a source waterbody into and through a power plant's cooling system, where they are killed or injured by thermal, physical and chemical shocks.

<sup>2</sup> *Impingement* refers to the trapping of adult and juvenile fish and other large aquatic organisms, including sea turtles and marine mammals, on the screens of an intake structure, which can kill or injure those animals through asphyxiation, descaling and other harms.

ecosystem.” *Riverkeeper, Inc. v. U.S. EPA*, 358 F.3d 174, 181 (2d Cir. 2004).

**B. EPA’s Regulations and the Endangered Species Act Consultation.**

26. In the Clean Water Act of 1972, Congress ordered EPA to minimize the devastating environmental impacts that cooling water intake structures have on America’s waters by setting nationally uniform and binding regulations. See CWA Section 316(b); 33 U.S.C. § 1326(b).

27. In 2001, 2004 and 2006 EPA promulgated Section 316(b) regulations that were challenged and upheld in part and remanded in part. See *Riverkeeper, Inc. v. U.S. EPA*, 358 F.3d 174 (2d Cir. 2004) (“*Riverkeeper I*”); *Riverkeeper, Inc. v. U.S. EPA*, 475 F.3d 83 (2d Cir. 2007) (“*Riverkeeper*”); *ConocoPhillips Co. v. EPA*, 612 F.3d 822 (5th Cir. 2010).

28. In 2007, EPA suspended the regulations that were remanded in large part by the Second Circuit in *Riverkeeper II*. 72 Fed. Reg. 37,107, 37,108 (July 9, 2007).

29. On remand from the circuit courts, in 2011, EPA proposed new Section 316(b) regulations for existing facilities and revised its regulations for new facilities.

30. On June 18, 2013, EPA initiated the formal ESA Consultation with NMFS and the FWS following comments by environmental groups, including Sierra Club, that EPA must undertake such consultation.

31. The ESA Consultation concluded approximately eleven months later, on May 19, 2014, with the Services’ release of a programmatic biological opinion on EPA’s

issuance and implementation of the 316(b) Rule (“Biological Opinion”).

32. On May 19, 2014, the EPA Administrator signed the final 316(b) Rule, entitled *National Pollutant Discharge Elimination System—Final Regulations to Establish Requirements for Cooling Water Intake Structures at Existing Facilities and Amend Requirements at Phase I Facilities* (EPA-HQ-OW-2008-0667).

33. EPA published the 316(b) Rule in the Federal Register on August 15, 2014.

**C. The FOIA Request.**

34. On August 11, 2014, Sierra Club submitted FOIA requests to Defendants asking that they make available for inspection and copying eight categories of records relating to the 316(b) Rule, Biological Opinion and ESA Consultation. *See* Exhibits A & B.

**D. NMFS’s Response.**

35. NMFS’s response to Sierra Club’s request has been wholly inadequate.

36. On August 13, 2014, NMFS mailed an initial response acknowledging receipt of Sierra Club’s August 11, 2014, request and assigned that request a tracking number, FOIA# DOC-NOAA-2014-001474. *See* Exhibit C

37. On August 27, 2014, counsel for the parties conferred regarding the scope of the request.

38. On September 8, 2014, Sierra Club agreed to narrow the scope of the request to exclude records containing routine administrative matters and personally identifiable information. *See* Exhibit D.

39. On September 25, 2014, Sierra Club received an email from NMFS estimating that the “earliest [NMFS] can provide a response is November 21[, 2014].” See Exhibit E.

40. Having received no records from NMFS, on December 3, 2014, Sierra Club requested a status update from NMFS.

41. On December 11, 2014, NMFS responded that it was not able to provide an estimated date of completion, but “anticipate[d] being able to provide a date certain for providing our response” by the end of January 2015. See Exhibit F.

42. After January 2015 passed with no information from NMFS, on February 24, 2015, Sierra Club requested a status update from NMFS, followed by another request for a status update on March 4, 2015.

43. On March 3, 2015, more than six months after Sierra Club submitted its FOIA request, NMFS released the first production of responsive records, which was composed of only five documents totaling 51 pages.

44. On March 4, 2015, after a telephone conversation between the parties, counsel for NMFS sent Sierra Club an email stating that “review of the documents responsive to the FOIA request will occur in conjunction with the preparation of the administrative record in the pending litigation. . . . We anticipate being able to provide a final response approximately one month after the filing of the administrative record [in *Cooling Water Intake Structure v. U.S. Environmental Protection Agency*, U.S. Court of Appeals for the Second Circuit, No. 14-4645 and consolidated cases].” See Exhibit G. Sierra Club and NMFS are parties to the referenced

*Cooling Water Intake Structure v. EPA* case in the Second Circuit. The administrative record in that case was due on July 13, 2015 (and, indeed, was filed on that date). Thus, the anticipated date of completion in NMFS's March 4, 2015, email was August 13, 2015.

45. In July 2015, NMFS informed Sierra Club that it would not complete its response to the FOIA request by August 13, 2015, and that the new estimated completion date for the FOIA request would be October 30, 2015.

46. On or about August 3, 2015, Sierra Club received a second partial production from NMFS consisting of 353 documents. *See* Exhibit H.

47. On or about September 10, 2015, Sierra Club received a third partial production from NMFS consisting of 73 documents. *See* Exhibit I.

48. On September 29, 2015, NMFS notified Sierra Club that it would be unable to complete its response to the FOIA request by October 30, 2015, and anticipated providing a final release of documents by January 31, 2016. *See* Exhibit J.

49. On November 2, 2015, Sierra Club received a fourth partial production consisting of 268 emails and attachments. In its November 2nd response, NMFS redacted 75 documents and withheld 688 documents. *See* Exhibit K.

50. On or about November 13, 2015, Sierra Club submitted an administrative appeal to NMFS concerning NMFS's excessive and undue delay in complying with FOIA as well as NMFS's misuse of the deliberative process privilege to withhold responsive records. *See* Exhibit L.

51. The statutory deadline for responding to Sierra Club's appeal was December 14, 2015, *See* 5 U.S.C. § 552(a)(6)(A)(ii) (20 business days). NMFS did not timely respond to the appeal.

52. On or about December 11, 2015, Sierra Club received a fifth partial production consisting of 268 emails and attachments. In its December 11th response, NMFS partially redacted 269 documents, fully redacted 212 documents, and withheld 392 documents. *See* Exhibit M.

53. More than sixteen months has now passed since NMFS received Sierra Club's FOIA request, NMFS has repeatedly extended the date by which it would complete production of documents responsive to the request, has not completed its production, and has unlawfully redacted and withheld responsive documents.

**E. FWS's Response.**

54. FWS's response to Sierra Club's request has been legally inadequate.

55. On or about January 8, 2016, after four interim releases of documents, FWS completed its response to the FOIA request. Over the course of these productions, FWS produced some documents, but partially denied Sierra Club's FOIA request by redacting 346 emails and withholding attachments.

56. On or about January 8, 2016, FWS informed Sierra Club that it had 30 business days (i.e., until February 19, 2016) to appeal the agency's response. *See* Exhibit N. On February 16, 2016, Sierra Club timely appealed FWS's response to its FOIA request. *See* Exhibit O

57. The statutory deadline for responding to Sierra Club's appeal was March 15, 2016. *See* 5 U.S.C. § 552(a)(6)(A)(ii) (20 business days). FWS did not timely respond to the appeal.

## **VI. CLAIMS FOR RELIEF**

### **FIRST CAUSE OF ACTION**

#### **Failure to properly and timely comply with FOIA requirements**

##### **(Violation of FOIA, 5 U.S.C. §§ 552)**

58. Plaintiff realleges and incorporates the allegations of all the preceding paragraphs of this Complaint as if fully set forth herein.

59. By failing to properly and timely respond to Sierra Club's August 11, 2014 FOIA request and provide all records responsive thereto, NMFS has violated FOIA's mandate to release agency records to the public. *See* 5 U.S.C. §§ 552(a)(3)(A) and (a)(6).

60. By failing to timely make a determination with respect to Sierra Club's February 16, 2016 appeal, FWS has violated FOIA's mandate to respond to appeals within 20 business days. *See* 5 U.S.C. § 552(a)(6)(A)(ii).

61. Defendants have wrongfully withheld the requested records from Sierra Club.

62. Sierra Club has exhausted any and all applicable administrative remedies.

63. Sierra Club is entitled to obtain the requested records immediately.

**SECOND CAUSE OF ACTION****Improperly withholding responsive records****(Violation of FOIA, 5 U.S.C. §§ 552)**

64. Plaintiff realleges and incorporates the allegations of all the preceding paragraphs of this Complaint as if fully set forth herein.

65. Defendants have withheld documents, purportedly on the basis of FOIA exemptions, without meeting their burden of establishing that the exemption applies.

66. Defendants have improperly withheld and redacted documents responsive to Sierra Club's FOIA request that are not within the scope of the exemptions asserted by Defendants.

67. Defendants have wrongfully withheld requested records from Plaintiff.

68. Plaintiff has exhausted any and all applicable administrative remedies.

69. Sierra Club is entitled to obtain the requested records immediately.

**VII. RELIEF REQUESTED**

**WHEREFORE**, Plaintiff requests that this Court enter an order and judgment:

a. Declaring that Defendants have violated FOIA by failing to properly respond to Plaintiff's FOIA request and provide all responsive records;

b. Declaring that Defendants have failed to comply with FOIA's statutory deadlines.

c. Ordering that Defendants immediately produce all requested records to Plaintiff along with a



“*Vaughn* index” of any records withheld under claim of exemption;

d. Ordering that Defendants produce any documents listed on its *Vaughn* index that the Court determines are not exempt from FOIA;

e. Awarding Plaintiff its litigation costs and reasonable attorneys’ fees in this action; and

f. Ordering such other and further relief as the Court may deem just and proper.

Dated: Mar. 22, 2015

Respectfully submitted,  
SUPER LAW GROUP, LLC.

By: /s/ REED W. SUPER  
REED W. SUPER  
Attorney for Plaintiff  
Sierra Club

**To:** Helen Golde — NOAA Federal[helen.golde@noaa.gov]  
**Cc:** Samuel Rauch — NOAA Federal[samuel.rauch@noaa.gov]; Mary Beth Ward — NOAA Federal [mary.beth.ward@noaa.gov]  
**From:** Stoner, Nancy  
**Sent:** Wed 10/2/2013 12:05:50 PM  
**Subject:** RE: 316(b) consultation

Helen,

Work on the 316(b) rule is not considered excepted because of the terms of the settlement agreement, which allow us to seek an extension because of the gov't shutdown. We will get the revised language to you and to OMB promptly after the gov't reopens.

Nancy

**From:** Helen Golde — NOAA Federal [mailto:helen.golde@noaa.gov]  
**Sent:** Tuesday, Oct. 01, 2013 11:59 AM  
**To:** Stoner, Nancy  
**Cc:** Samuel Rauch — NOAA Federal; Mary Beth Ward — NOAA Federal  
**Subject:** 316(b) consultation

Hi Nancy:

As you are aware, on June 18, 2013, NOAA Fisheries initiated formal consultation with EPA on its CWIS rule; the Services and EPA agreed on August 29, 2013, as the due date for final rule revisions. This final rule will

serve as the basis for the “Description of the Action” for our Biological Opinion. Based on this schedule the Services agreed to provide a draft biological opinion to EPA on October 15, 2013 and a final opinion to EPA on October 31, 2013, which would have allowed EPA to meet its November 4 deadline to file the final rule with the Federal Register.

Based on our conversations with EPA staff, EPA intends to provide another revised rule with ESA edits, once those edits are approved by their administrators. Until then, we cannot write the majority of the Biological Opinion, including the description of the action and the effects analysis. However, as of the end of the workday September 30, 2013, EPA has not provided us the final revised rule incorporating our suggestions to help EPA fulfill its obligations under Sec. 7 of the ESA. Thus our biologists were not able to continue work on the consultation prior to being furloughed this morning.

It is our assumption that you will be seeking an extension with OMB to finalize this language and with DOJ to seek an extension of your rule due date of November 4. If this is not the case or that is unsuccessful, please contact Sam Rauch, NOAA Fisheries Deputy Assistant Administrator for Regulatory Programs (office: 301-427-8020; cell 301-938-6431; copied on this email), and we will initiate the process to recall Jennifer Schultz the consultation biologist. However, as noted above, NMFS will need the final rule language before recalling her.

Thank you,  
Helen

--

**Helen M. Golde**  
*Deputy Director*  
*NOAA Fisheries*  
*U.S. Department of Commerce*  
Office: 301-427-8400  
Mobile: 240-429-0344  
[helen.golde@noaa.gov](mailto:helen.golde@noaa.gov)  
[www.nmfs.noaa.gov/pr/](http://www.nmfs.noaa.gov/pr/)

## Conversation Contents

### Expectations for Completion of the 316(b) Consultation

**“Sayers, Rick” <rick\_sayers@fws.gov>**

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**From:** “Sayers, Rick” <rick\_sayers@fws.gov>  
**Sent:** Thu Oct 31 2013 06:48:27 GMT-0600 (MDT)  
**To:** “Wood, Robert” <wood.robert@epa.gov>  
**Subject:** Expectations for Completion of the 316(b) Consultation

Rob—

Thanks for your call this morning. I would like to clarify our plans and make sure these will work for EPA and FWS.

We had originally promised to deliver a draft BO within 30 days and a final BO within 45 days of receipt of the revised regulation. With the exact date of the receipt of the regulations still not set, and the Thanksgiving holiday period now encompassed by the time frame at issue, I need to offer a revised expectation that I think will still fit with the dates you and I discussed for a possible settlement extension.

With the assumption that we will receive a revised regulation no later than November 1, 2013, we would commit to deliver a draft BO to EPA no later than December 6th and a final BO (assuming prompt response from EPA) no later than December 20th. These adjustments are necessary to accommodate the approved leave requests that our lead staff person has submitted. If there are

further delays in transmitting the revised regulations beyond November 1, 2013, these dates will need to extend further out as our ability to conduct timely and thorough review of the draft and final documents will be hindered by several people (myself included) using large blocks of leave starting around December 20th.

Rick Sayers  
Chief, Division of Environmental Review  
U.S. Fish & Wildlife Service — Ecological Services  
4401 N. Fairfax Dr., Rm 420  
Arlington, VA 22203  
(703) 358-2442

**“Sayers, Rick” <rick\_sayers@fws.gov>**

NOAA

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**From:** NOAA  
**Sent:** Tuesday, Dec. 03, 2013 5:21 PM  
**To:** Wendy Piniak — NOAA Affiliate  
**Subject:** Fwd: rollout plan for the EPA draft BiOp  
**Attachments:** 316(b)draft\_rollout 12\_3\_2013 PBL.docx; ATT00638.htm

Hi Wendy,

To answer your other email, [REDACTED]? If you want wording, you can use language from the rollout (this is draft, Jonathan is working on final). Also, I will be in tomorrow morning if you'd rather I do it.

Thanks!

Jenny

Sent from my iPhone

Begin forwarded message:

**From:** Jennifer Schultz — NOAA Federal <[jennifer.schultz@noaa.gov](mailto:jennifer.schultz@noaa.gov)>  
**Date:** Dec. 3, 2013, 9:19:35 AM EST  
**To:** Jonathan Shannon — NOAA Federal <[jonathan.shannon@noaa.gov](mailto:jonathan.shannon@noaa.gov)>  
**Subject: Re:** rollout plan for the EPA draft BiOp

Hello again,

With corrections to names/phone numbers.

**Jennifer Schultz, Ph.D.**

*Endangered Species Act Interagency Cooperation  
Division  
Office of Protected Resources  
NOAA Fisheries  
U.S. Department of Commerce  
301-427-8443*

[jennifer.schultz@noaa.gov](mailto:jennifer.schultz@noaa.gov)  
[www.nmfs.noaa.gov](http://www.nmfs.noaa.gov)



On Tue, Dec 3, 2013 at 8:21 AM, Jonathan Shannon  
— NOAA Federal

<[jonathan.shannon@noaa.gov](mailto:jonathan.shannon@noaa.gov)> wrote:

Jenny,

Thank you, I have to finish the right whale rollout but  
can review this later this morning or early afternoon.  
Put me as the rollout lead instead of Christina  
Durham.

NOAA PCO — *Celeste Leroux* [202-482-1172](tel:202-482-1172)

NOAA Leg Affairs — Christina Durham [202-482-5935](tel:202-482-5935)

Tanya D. is detail to the Marine Mammal Commission,  
so she is no longer our leg affairs, it is Christina D.



We should also provide these talking points to Connie Barclay in Public Affairs and Kate Naughten in Fisheries Communications so they are aware. I'll add them in during my edit.

Best,

**Jonathan Shannon**

*Outreach Specialist*

*NOAA Fisheries Office of Protected Resources*

*U.S. Department of Commerce*

Office: 301-427-8431

jonathan.shannon@noaa.gov

☒

Web	<u><a href="http://www.nmfs.noaa.gov/pr">www.nmfs.noaa.gov/pr</a></u>
Facebook	<u><a href="http://www.facebook.com/usnoaafisheriesgov">www.facebook.com/usnoaafisheriesgov</a></u>
Twitter	<u><a href="http://www.twitter.com/noaafisheries">www.twitter.com/noaafisheries</a></u>
YouTube	<u><a href="http://www.youtube.com/usnoaafisheriesgov">www.youtube.com/usnoaafisheriesgov</a></u>

On Mon, Dec 2, 2013 at 7:21 PM, Pam lawrence <[pamela.lawrence@noaa.gov](mailto:pamela.lawrence@noaa.gov)> wrote:

Ron, I agree that it is likely that EPA will put this draft on their docket. We should probably ask them if they are going to.

I had a few comments on the attached. I put in the heading that NMFS did not plan a public release. I added "draft" a few places to clarify. I also added a couple of bullets at the end about what happens next.

I am around tomorrow if anyone has questions. 301-713-9672 or 240-328-9928.

On 12/2/2013 7:16 PM, Ron Dean — NOAA Federal wrote:

EPA OW has a track record of putting these drafts on their docket which then show up on regulations.gov, so this is a really good idea.

On Mon, Dec 2, 2013 at 6:50 PM, Jennifer Schultz — NOAA Federal <[jennifer.schultz@noaa.gov](mailto:jennifer.schultz@noaa.gov)> wrote:

Hello everyone,

I apologize for the mass email, but we need to turn this around quickly. F-suite has requested a roll-out plan for the 316(b) draft opinion by COB tomorrow, and I know that Cathy, Helen, and Donna are going to be on a retreat.

The draft roll-out plan is attached. I know that you are busy reviewing the draft opinion, and it is not necessary for everyone to review the roll-out plan. Pam, can you review the draft, and Cathy can you give the “OK” to send to Helen and Donna?

I am also cc'ing Jonathan so that he is in the loop (Jonathan, this is a draft, so it will not be posted on our website, but I wanted you to be aware that it is out there). Jonathan, do you have phone numbers for Celeste and Christina? Also, do you know if Tanya is still our legislative contact?

Thank you!

Jenny

**Jennifer Schultz, Ph.D.**

*Endangered Species Act Interagency Cooperation Division*

*Office of Protected Resources*

*NOAA Fisheries*

*U.S. Department of Commerce*

**301-427-8443**

[jennifer.schultz@noaa.gov](mailto:jennifer.schultz@noaa.gov)

[www.nmfs.noaa.gov](http://www.nmfs.noaa.gov)



----- Forwarded message -----

**From: Brianne Smith — NOAA Federal**

<[brianne.smith@noaa.gov](mailto:brianne.smith@noaa.gov)>

Date: Mon, Dec 2, 2013 at 6:10 PM

Subject: Re: rollout plan for the EPA draft  
BiOp

To: Jennifer Schultz — NOAA Federal

<[jennifer.schultz@noaa.gov](mailto:jennifer.schultz@noaa.gov)>

Cc: Wendy Piniak — NOAA Affiliate <[wendy.piniak@noaa.gov](mailto:wendy.piniak@noaa.gov)>

No one's in NOAA Policy now, so you can skip that person. Celeste Leroux is the NOAA PCO and Christina Durham would be the lead for this action.

Thanks!!

Brianne

On Mon, Dec 2, 2013 at 5:58 PM, Jennifer Schultz — NOAA Federal <[jennifer.schultz@noaa.gov](mailto:jennifer.schultz@noaa.gov)> wrote:

Hi Brianna and Wendy,

No problem, I will put it together tonight and send it out for review tomorrow. Do either of you have a recent roll-out plan so I know who is currently serving in the various roles (NOAA policy, etc.)?

Thanks,

Jenny

**Jennifer Schultz, Ph.D.**

*Endangered Species Act Interagency Cooperation Division*

*Office of Protected Resources*

*NOAA Fisheries*

*U.S. Department of Commerce*

**301-427-8443**

[jennifer.schultz@noaa.gov](mailto:jennifer.schultz@noaa.gov)

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☒

On Mon, Dec 2, 2013 at 3:56 PM, Brianne Smith — NOAA Federal <[brianne.smith@noaa.gov](mailto:brianne.smith@noaa.gov)> wrote:

Hi Jenny,

If you want to roll out by Friday, ideally, I'd like to have it by no later than COB tomorrow/early Wed. I need to have some time to circulate it for review. Do you know (or can you find out) whether EPA plans to make the draft available to anyone (i.e., the Hill or OMB)? If you'd like Christina to reach out to her counterpart at EPA, she can do that, but I wanted to check with you first.

thanks,  
Brianne

Also,

On Mon, Dec 2, 2013 at 3:37 PM, Jennifer Schultz — NOAA Federal <[jennifer.schultz@noaa.gov](mailto:jennifer.schultz@noaa.gov)> wrote:

Hi Wendy,

Yes, I can prepare something . . . can i get it to you and Brianne by Wednesday COB, or do you need it earlier?

Jenny

**Jennifer Schultz, Ph.D.**  
*Endangered Species Act Interagency Cooperation Division*  
*Office of Protected Resources*  
*NOAA Fisheries*  
*U.S. Department of Commerce*  
**301-427-8443**

[jennifer.schultz@noaa.gov](mailto:jennifer.schultz@noaa.gov)  
[www.nmfs.noaa.gov](http://www.nmfs.noaa.gov)

☒

On Mon, Dec 2, 2013 at 2:26 PM, Wendy Piniak — NOAA Affiliate <[wendy.piniak@noaa.gov](mailto:wendy.piniak@noaa.gov)> wrote:

Hi Jenny,

Just checking in for Brianne on the EPA draft BiOp (scheduled for release still on the 6th?) — do you have a draft rollout plan she can send out for review?

Thanks!  
Wendy

~~~~~

**Wendy E. D. Piniak, Ph.D.**  
*Protected Resources Office of the Director*  
*NOAA Fisheries*  
*Department of Commerce*  
*Office: 301-427-8416*  
*Mobile: 717-880-4793*

[wendy.piniak@noaa.gov](mailto:wendy.piniak@noaa.gov)  
[www.nmfs.noaa.gov/pr](http://www.nmfs.noaa.gov/pr)

--

Brianne Smith  
Office of the Assistant Administrator  
National Marine Fisheries Service  
NOAA  
**(301) 427-8022** **brianne.smith@noaa.gov**

--

Brianne Smith  
Office of the Assistant Administrator  
National Marine Fisheries Service  
NOAA  
**(301) 427-8022** **brianne.smith@noaa.gov**

--

Ron Dean  
Office of Protected Resources  
NOAA National Marine Fisheries Service  
1315 East-West Highway Rm. 13755  
Silver Spring, MD 20910  
**301.427.8445**

**To:** Stoner, Nancy[Stoner.Nancy@epa.gov]  
**From:** Wood, Robert  
**Sent:** Tue 12/3/2013 1:01:34 PM  
**Subject:** Re: Plan to talk to Bob P about 316(b) and ESA.

I believe it does not become public until the BiOps are finalized. I'm checking to verify.

---

**From:** Stoner, Nancy  
**Sent:** Tuesday, Dec. 03, 2013 7:53:56 AM  
**To:** Wood, Robert; Southerland, Elizabeth  
**Cc:** Kopocis, Ken  
**Subject:** Re: Plan to talk to Bob P about 316(b) and ESA.

So is it public on Friday or just later it becomes public that there was a draft BiOp with a jeopardy opinion?

---

**From:** Wood, Robert  
**Sent:** Tuesday, Dec. 03, 2013 7:51:37 AM  
**To:** Stoner, Nancy; Southerland, Elizabeth  
**Cc:** Kopocis, Ken  
**Subject:** Re: Plan to talk to Bob P about 316(b) and ESA.

As far as I know, Services plan to give EPA draft Jeopardy opinions for review this Friday 12/6. I am trying



to verify both the date and the type of opinion with Services and Courtney. Will let you know asap if any new information.

Also, as you know from Jenny's email, they plan to put all meeting notes, emails and draft opinions in the record.

I expect to talk to Paul Souza sometime this morning to catch up.

---

**From:** Stoner, Nancy  
**Sent:** Tuesday, Dec. 03, 2013 7:28:41 AM  
**To:** Southerland, Elizabeth; Wood, Robert  
**Cc:** Kopocis, Ken  
**Subject:** Plan to talk to Bob P about 316(b) and ESA.

What intel do we have?

ÿ

**To:** Stoner, Nancy[Stoner.Nancy@epa.gov]  
**From:** Southerland, Elizabeth  
**Sent:** Tue 12/3/2013 12:48:51 PM  
**Subject:** Re: Plan to talk to Bob P about 316(b) and ESA.

Will do. I will also tell him we will need to elevate if we can't get final OMB comments asap on non ESA issues.

---

From: Stoner, Nancy  
Sent: Tuesday, Dec. 03, 2013 7:47:03 AM  
To: Southerland, Elizabeth  
Subject: Re: Plan to talk to Bob P about 316(b) and  
ESA.

Maybe you should call Jim.

---

From: Southerland, Elizabeth  
Sent: Tuesday, Dec. 03, 2013 7:44:18 AM  
To: Stoner, Nancy; Wood, Robert  
Cc: Kopocis, Ken  
Subject: Re: Plan to talk to Bob P about 316(b) and  
ESA.

Rob wasn't able to reach Courtney yesterday but can keep trying today. In the meantime, Services confirmed their draft Biop expected this Friday will be in the record.

---

From: Stoner, Nancy  
Sent: Tuesday, Dec. 03, 2013 7:28:41 AM  
To: Southerland, Elizabeth; Wood, Robert  
Cc: Kopocis, Ken  
Subject: Plan to talk to Bob P about 316(b) and ESA.

What intel do we have?

ÿ

**From:** Wellman, Lois  
**To:** Drew Crane  
**Subject:** Gary's edits  
**Date:** Monday, Dec. 09, 2013 10:23:16 AM  
**Attachments:** 316b\_BiOp-Draft\_V5 (1).docx  
Attachment Withheld - b5 Deliberative Process

---

Drew,

I made the edits Gary requested. Please refer to the highlighted portion of the letter (2nd page) for Gary's instructions for you. He said to do the other stuff he gave you first. Once this is done I can email him and we have an autopen with his signature we can use to send it out. Please let me know if you have any questions.

Lois

--

Lois Wellman  
AES Administrative Assistant  
Office of the Assistant Director for Ecological Services  
U.S. Fish & Wildlife Service  
1849 C St. NW  
MIB 3345  
Washington, DC 20240  
(202)208-4646/(202)208-5618 fax  
[Lois\\_Wellman@fws.gov](mailto:Lois_Wellman@fws.gov)

**To:** Kopocis, Ken[Kopocis.Ken@epa.gov]; Feldt, Lisa[Feldt.Lisa@epa.gov]; Neugeboren, Steven [Neugeboren.Steven@epa.gov]  
**From:** Garbow, Avi  
**Sent:** Thur 12/12/2013 8:32:54 PM  
**Subject:** FW: Next steps  
Draft RPA.docx

See below and attached.

Avi Garbow  
General Counsel  
U.S. Environmental Protection Agency  
(202) 564-8040

**From:** Boling, Edward [mailto:ted.boling@sol.doi.gov]  
**Sent:** Thursday, Dec. 12, 2013 3:32 PM  
**To:** Garbow, Avi  
**Cc:** Lois J. Schiffer  
**Subject:** Re: Next steps

Avi:

Attached per our conversations, are the current draft RPAs for further discussion. I've heard from Gary Frazer that Rob Wood has scheduled a meeting for tomorrow at 9:30am and that FWS is flying people back from Denver in time for that meeting. Please feel free to call me to discuss. If not reachable at the numbers below, I'm always available at [REDACTED]

Best,

Ted Boling  
Deputy Solicitor — Parks & Wildlife  
U.S Department of the Interior  
1849 C Street NW Washington, DC 20240  
202-208-4423 (main)  
202-208-3125 (direct )  
202-208-5584 (fax)  
[Ted.Boling@sol.doi.gov](mailto:Ted.Boling@sol.doi.gov)

On Thu, Dec 12 2013 at 12:04 PM, Boling, Edward  
<[ted.boling@sol.doi.gov](mailto:ted.boling@sol.doi.gov)> wrote:

Avi — following up on vm, I'd like to touch base with  
you about transmitting a document to EPA.

I'm available on the direct line below or on cell at [**RE-  
DACTED**]

Ted Boling  
Deputy Solicitor — Parks & Wildlife  
U.S Department of the Interior  
1849 C Street NW  
Washington, DC 20240  
202-208-4423 (main)  
202-208-3125 (direct)

202-208-5584 (fax)

[Ted.Boling@sol.doi.gov](mailto:Ted.Boling@sol.doi.gov)

**To:** Kopocis, Ken[Kopocis.Ken@epa.gov]  
**From:** Southerland, Elizabeth  
**Sent:** Tue 12/17/2013 6:30:14 PM  
**Subject:** FW: Services paper on RPA's/conditions.  
Revised Combined NMFS and USFWS RPA-12.17.  
2013 noon PBL (3).docx

*Elizabeth Southerland, Director*

*Office of Science & Technology*

*Office Water*

*Room 5233A - MC - 4301T*

*Washington, D.C. 20460*

*Direct: (202) 566-0328*

*Fax: (202) 566-0441*

**From:** Lois Schiffer — NOAA Federal [mailto:lois.schiffer@noaa.gov]  
**Sent:** Tuesday Dec. 17, 2013 12:15 PM  
**To:** Southerland, Elizabeth; Wood, Robert; Boling, Ted; Rick Sayers; Christine Blackburn; Donna Wieting — NOAA Federal; cathy.tortorici@noaa.gov; Jennifer Schultz — NOAA Federal; Pamela Lawrence — NOAA Federal  
**Subject:** Services paper on RPA's/conditions.

--

Lois Schiffer  
General Counsel  
National Oceanic & Atmospheric Administration  
U.S. Department of Commerce  
Phone: 202-482-4080  
Cell: 202-573-1583  
Email: [Lois.Schiffer@noaa.gov](mailto:Lois.Schiffer@noaa.gov)



**United States Department of the Interior**  
**FISH AND WILDLIFE SERVICE**  
**Washington, D.C. 20240**

In Response Refer To:  
FWS/AES/DER/BCH/056189

Mr. Robert Wood  
Director  
Engineering and Analysis Division  
Office of Water  
U.S. Environmental Protection Agency  
Washington, D.C. 20460

Dear Mr. Wood:

In accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.), and the Interagency Cooperation Regulations (50 CFR 402), this transmits our final biological opinion (Opinion) on the U.S. Environmental Protection Agency's (EPA) issuance and implementation of the final regulations implementing Section 316(b) of the Clean Water Act (CWA). Section 7(a)(2) of the ESA of 1973, as amended (16 U.S.C. 1536(a)(2)), requires Federal agencies to insure that any action they authorize,



fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat. When a Federal agency's action may affect listed species or critical habitat, formal consultation with the National Marine Fisheries Service (NMFS) and/or the U.S. Fish and Wildlife Service (USFWS) is required (50 CFR 402.14(a)). EPA requested formal consultation even though EPA was of the opinion that its action would not cause adverse effects to listed species and critical habitat. After review of the proposed regulation, biological evaluation, and other available information we determined that the proposed action is likely to adversely affect threatened and endangered species and designated critical habitat.

Federal agencies may request a conference on a proposed action that may affect proposed species or proposed critical habitat. While the EPA request for consultation indicates proposed species were addressed in the biological evaluation, a conference opinion was not requested, nor was the information presented in the biological evaluation sufficient to complete a conference opinion for all proposed species. Therefore, we are not providing a conference opinion at this time.

EPA proposes to issue and implement final regulations (40 CFR 122 and 125; Rule) to establish requirements for cooling water intake structures (CWIS) at existing facilities under section 316(b) of the CWA. This document transmits a joint NMFS and USFWS Opinion on the proposed action and its effects on ESA-listed species and designated critical habitat. We based our Opinion on information provided in the draft Rule and Preamble, the Services' interpretations of that rule as agreed upon

by EPA on April 8, 2014, the biological evaluation for the CWA section 316(b) Rulemaking provided by EPA on June 18, 2013, consultation meetings, peer-reviewed publications, recovery plans, government reports, grey literature, scientific and commercial data, and other sources of information. We prepared our Opinion in accordance with section 7(a)(2) of the statute (16 U.S.C. 1536(a)(2)), associated implementing regulations (50 CFR 402), and agency policy and guidance (USFWS and NMFS 1998).

We appreciate your commitment in the conservation of endangered species. If you require further assistance or have any questions, please contact Ms. Cathy Tortorici, Chief, Interagency Cooperation Division, NMFS, at 301-427-8495 or by e-mail at [cathy.tortorici@noaa.gov](mailto:cathy.tortorici@noaa.gov), or Ms. Patrice Ashfield, Chief, Branch of Consultations and Habitat Conservation Planning, USFWS, at 703-358-2478 or by e-mail at [patrice\\_ashfield@fws.gov](mailto:patrice_ashfield@fws.gov).

Sincerely,



Donna Wieting  
Director for  
Office of Protected Resources



Gary Frazer  
Assistant Director for  
Ecological Services

Attachment

**Endangered Species Act Section 7 Consultation**  
**Programmatic Biological Opinion**  
**on the**  
**U.S. Environmental Protection Agency's**  
**Issuance and Implementation of the**  
**Final Regulations**  
**Section 316(b) of the Clean Water Act**



U.S. Fish and Wildlife  
Service  
Endangered Species  
Program  
Division of Environmen-  
tal Review  
Arlington, Virginia



National Marine Fisher-  
ies Service  
Office of Protected  
Resources  
Endangered Species Act  
Interagency Cooperation  
Division  
Silver Spring, Maryland

May 19, 2014

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## 1.0 Consultation History

On July 9, 2004, U.S. Environmental Protection Agency (EPA) promulgated regulations establishing requirements for Cooling Water Intake Structures (CWIS) at existing facilities (69 FR 41576). On January 25, 2007, the Second Circuit remanded parts of the regulations to EPA (*Riverkeeper, Inc., v. EPA*, 475 F.3d 83 (2nd Circuit 2007) holding that EPA impermissibly balanced costs and benefits in developing the requirements. On July 9, 2007, EPA suspended the regulations (72 FR 37107). On April 1, 2009, the U.S. Supreme Court reversed, holding that EPA could consider costs and benefits in its regulatory decisions under section 316(b) (*Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. 208 (2009)).

On November 22, 2010, EPA signed a settlement agreement with Riverkeeper, Inc. to establish rulemaking dates, which included final action by July 27, 2012. On July 17, 2012, the parties agreed to an amendment to extend the date for the final Rule until July 27, 2013.

On April 20, 2011, pursuant to section 316(b) of the Clean Water Act (CWA), EPA proposed regulations establishing requirements for CWISs at existing facilities (76 FR 22174). In its proposed Rule, EPA replaces with amendments the suspended regulations establishing requirements for CWISs at existing facilities.

On July 20, 2012, EPA met with the National Marine Fisheries Service (NMFS) to commence informal ESA Section 7(a)(2) consultation.

On October 1, 2012, EPA met with the U.S. Fish and Wildlife Service (USFWS) to commence informal ESA section 7 consultation. The USFWS and NMFS (i.e., the Services) met with EPA numerous times to discuss

their action, its impacts to listed species, and measures to minimize impacts.

On April 4, 2013, EPA sent the Services an early draft of the Rule.

On April 12, 2013, the Services provided comments on the early draft of the Rule.

On June 18, 2013, EPA submitted a section 7 consultation initiation package, which included the draft Rule, draft Preamble, and biological evaluation. We initiated formal consultation on June 18, 2013.

On June 27, 2013, EPA signed a modified settlement agreement with Riverkeeper, Inc. to extend the date for the final Rule until November 4, 2013, to allow for the completion of formal section 7 consultation with the Services. This deadline was subsequently extended to January 14, 2014 and then to April 17.

Between June 27 and November 4, the Services met with EPA frequently to discuss EPA's action.

On November 4, 2013, we received a revised version of the proposed 316(b) Rule from Office of Management and Budget.

On November 15, 2013, we sent the Description of the Action to EPA for review.

On November 26, 2013, EPA sent corrections and comments on the Description of the Action and we incorporated their edits into the final Description of the Action.

From December 6, 2013, through March 11, 2014, the Services and EPA engaged in numerous exchanges about possible revisions to the processes embodied in EPA's draft final Rule.

On March 14, 2014, EPA sent the Services the final Rule and Preamble.

On March 31, 2014, the Services provided EPA with a document seeking clarification on the Services' understandings of key elements in EPA's proposed action).

On April 8, 2014, EPA provided confirmation on the Services' description and understanding of the key elements of EPA proposed action. (Attached as Appendix A)

## **2.0 Description of the Proposed Action**

EPA proposes to issue and implement a final Rule to establish requirements for CWIS at existing facilities and modify certain requirements for new facilities under an existing rule. EPA will amend specific parts of the Rule, which implement section 316(b) of the CWA, that had previously been suspended (72 FR 37107) in response to the 2nd Circuit Court of Appeals' decision in *Riverkeeper, Inc., v. EPA*. These parts include: 40 CFR 122.21(r)(1)(ii) and (5), 125.90(a), (c), and (d), and 125.91 through 125.99. In response to the Court's remand, EPA in its final regulation also proposes to remove the restoration-based compliance alternative and associated monitoring and demonstration requirements for new facilities (125.84(c) and (d)(1))<sup>1</sup>. In addition, EPA proposes to modify other parts of its regulations

---

<sup>1</sup> The removal of the restoration-based compliance alternative and associated monitoring and documentation requirements for new facilities are non-discretionary actions on the part of EPA and therefore, the effects of these actions are not being addressed in this biological opinion.



implementing section 316(b) to establish new requirements for all existing power generating facilities and existing manufacturing and industrial facilities that withdraw more than two million gallons of water per day (mgd) from waters of the United States and use at least 25 percent of the water they withdraw exclusively for cooling purposes (76 FR 22173). In summary, in response to litigation, EPA will issue a final Rule to establish modified or new requirements for facilities that withdraw water for CWIS.

Section 316(b) of the CWA requires that the location, design, construction, and capacity of CWIS reflect the best technology available (BTA) for minimizing adverse environmental impacts. Under the regulation, the term “cooling water intake structure” means the total physical structure and any associated waterways used to withdraw cooling water from waters of the United States. For purposes of the final Rule, adverse environmental impacts include, but are not limited to, impingement and entrainment at CWIS, including adverse effects to federally-listed species (species listed as threatened or endangered under the ESA or ESA-listed species) and designated critical habitat, and changes in flow regime, caused by the withdrawal of water. Impingement is defined as the entrapment of any life stages of fish and shellfish on the outer part of an intake structure or against a screening device during periods of intake water withdrawal. Entrapment is defined as the condition where impingeable fish and shellfish lack the means to escape the cooling water intake. Entrainment is defined as any life stages of fish and shellfish in the intake water flow entering and passing through a cooling water intake structure and into a cooling water system, including the condenser or heat exchanger.

EPA tailored the Rule toward the protection of fish and shellfish. However, federally-listed aquatic organisms that do not fall into the classification of fish and shellfish are also impacted by impingement, entrainment, and entrapment (e.g., manatees, turtles). The Rule provides that the Director may establish in the permit additional control measures, monitoring and reporting requirements that are designed to minimize incidental take, reduce or remove more than minor detrimental effects (as defined on page 4 of this Opinion) to federally-listed species and designated critical habitat, or avoid jeopardizing federally-listed species or destroying or modifying designated critical habitat. As such, and based on communication received from EPA on April 8, 2014, (Appendix A), the Rule's application to "fish and shellfish" and the Director's authority to establish additional measures to protect listed species and habitat will encompass all taxa of listed species, including their critical habitat. This consultation also considers the direct and indirect effects to federally-listed species caused by facilities operating CWIS under requirements of the Rule, including but not limited to; impingement, entrainment, loss of prey, changes in water quality, and flow alteration.

The Rule regulates existing facilities and new units at existing facilities that withdraw cooling waters from waters of the United States and have, or require, a National Pollutant Discharge Elimination System (NPDES) permit, issued under section 402 of the CWA. The NPDES permit program is administered by State Directors in authorized States. However, EPA retains the NPDES permit program for facilities located in: Idaho, Massachusetts, New Hampshire, New Mexico, Dis-

trict of Columbia, American Samoa, Guam, Johnston Atoll, Midway Island, Northern Mariana Islands, Puerto Rico, and Wake Island, as well as certain Federal facilities and facilities located on Tribal Lands.

The Rule applies to owners or operators of existing facilities with CWISs that withdraw > 2 mgd and use at least 25 percent of the water for cooling purposes. It also applies to the State or EPA Regional Director (i.e., the Director<sup>2</sup>), who establishes controls under CWA Section 316(b) authority on withdrawals through the NPDES permitting process. Regulatory requirements are described in full in the Rule (40 CFR 122 and 40 CFR 125) and further explained in the Preamble. Here, we summarize the Rule, Preamble and relevant correspondence from EPA to describe EPA's action with sufficient detail to evaluate its impact on ESA-listed species and designated critical habitat.

### **2.1 EPA Requirements**

When EPA is the NPDES permitting authority and has determined the issuance of the permit may affect ESA-listed species or designated critical habitat, they then must request consultation under section 7(a)(2) of the ESA. As discussed in Section 2.3, regarding State or Tribal-issued CWIS permits, in the Preamble, EPA reaffirms its commitment to the procedures stipulated in the 2001 Memorandum of Agreement (MOA) signed by EPA, and the Services (66 FR 11202). EPA has incorporated as part of its action relevant sections of the MOA, as described in the Preamble to the Rule and, based on correspondence with EPA received on April 8,

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<sup>2</sup> See 40 CFR 122.2 for the Definition of Director as used in the Rule.

2014 (attached as Appendix A), EPA commits to the following implementation of their NPDES oversight authorities in situations where the Services contact EPA with concerns that a State or Tribal permit will have more than minor detrimental effects on federally-listed species or critical habitat that cannot be resolved with the State or Tribal permitting authority:

- i. EPA will coordinate with the State or Tribe to ensure that the permit will comply with all applicable CWA requirements and will discuss appropriate measures protective of federally-listed species and critical habitat;
- ii. EPA will work with the State or Tribe to reduce or remove the detrimental impacts of the permit, including, in appropriate circumstances, by objecting to and federalizing the permit where consistent with EPA's CWA authority; and
- iii. EPA will exercise the full extent of its CWA authority, to object to a permit proposed by a State where EPA finds (giving deference to the views of the Services) that a State or Tribal permit is likely to jeopardize the continued existence of such species or result in the destruction or adverse modification of such critical habitat.
  - o Based on correspondence received from EPA on April 8, 2014, EPA will give deference to the views of the Services with regard to effects on federally-listed fish and wildlife resources.

EPA has stated adverse environmental impacts include adverse effects to listed species (USEPA 2013f), and Section 316(b) of the CWA requires that

the location, design, construction, and capacity of CWIS reflect the BTA for minimizing adverse environmental impacts. Further, the phrase “more than minor detrimental effects” as used in the Rule, Preamble to the Rule, the 2001 MOA, and in EPA’s commitment to the implementation of their NPDES oversight authorities as described above, means “adverse effects” as that term is used in the ESA implementing regulations, consultation handbook, and MOA (66 FR 11207) and is one type of “adverse environmental impact” as that term is used under section 316(b) of the CWA. EPA has also defined minimize in the Rule as “to reduce to the smallest amount, extent, or degree reasonably possible.” In summary, EPA will exercise its oversight authority on proposed/draft permits where the Services contact EPA with concerns that a State or Tribal permit will have more than minor detrimental effects on Federally-listed species or designated critical habitat. Such situations may include where a permit does not minimize adverse effects to listed species to the smallest amount, extent, or degree reasonably possible.

## 2.2 Owner or Operator Requirements

In the Rule, EPA establishes certain requirements of the owner or operator of an existing facility \* \* \* .

\* \* \* \* \*

## 6.0 Environmental Baseline

\* \* \* \* \*

### *Clean Water Act*

Several laws and regulations have been put in place to help improve the state of our aquatic resources, the

principal one being the CWA. The original 1948 statute was totally re-written in 1972 to produce its current purpose: “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” (Federal Water Pollution Control Act, Public Law 92-500). Congress made substantial amendment to the CWA in the Water Quality Act of 1987 (P.L. 100-4) in response to the significant and persistent water quality problems.

To achieve its objectives, the CWA generally prohibits all point source discharges into the nation’s waters, unless otherwise authorized under the CWA. One of the main ways that point source discharges are regulated is through permits issued under the NPDES authorized under the CWA. For example, the NPDES program regulates discharges of pollutants like bacteria, oxygen-consuming materials, and toxic pollutants like heavy metals, pesticides, and other organic chemicals. EPA has also promulgated regulations setting effluent limitations guidelines and standards under sections 301, 304, and 306 of the CWA for more than 50 industries [40 CFR parts 405 through 471]. These effluent limitations guidelines and standards for categories of industrial dischargers are based on pollutants of concern discharged by industry; the degree of control that can be attained using pollution control technology; consideration of various economic tests appropriate to each level of control; and other factors identified in sections 304 and 306 of the CWA (such as non-water quality environmental impacts including energy impacts) (F76 FR 22174-22288). These effluent limitations have been credited for helping reduce the amount of pollutants like toxic metals entering the aquatic environment (Smail et

al 2012). While provisions of the CWA have helped significantly improve the quality of aquatic ecosystems, nonpoint sources of water pollution, which are believed to be responsible for the majority of modern water quality problems in the United States, are not subject to CWA permits or regulatory requirements. Instead, nonpoint sources of pollution are regulated by programs overseen by the States.

Water quality is important to all of the listed resources identified above in Tables 2 and 3. In some cases, the deterioration of water quality has led to the endangerment of aquatic species; in all cases, activities that threaten water quality also threaten these listed resources. Endangered and threatened species have experienced population declines that leave them vulnerable to a multitude of threats. Because of reduced abundance, low or highly variable growth capacity, and the loss of essential habitat, these species are less resilient to additional disturbances. In larger populations, stressors that affect only a limited number of individuals could once be tolerated by the species without resulting in population level impacts, whereas in smaller populations, the same stressors are more likely to reduce the likelihood of survival. It is with this understanding of the environmental baseline that we consider the effects of the proposed action, including the likely effect that CWIS's will have on endangered and threatened species and their designated critical habitat.

\* \* \* \* \*

#### **Impingement and Entrainment**

In the biological evaluation (pages 3, 10, 21-36, and others), EPA describes impingement and entrainment as

potential stressors likely to be produced as a result of its action. Impingement affects juvenile (e.g., young-of-year) and adult stages of ESA-listed species, while entrainment affects vulnerable early life stages (USEPA 2013c). As stated in the biological evaluation, impingement and entrainment from CWIS:

“. . . may represent a substantial portion of annual reproduction. Consequently, [impingement and entrainment] may either lengthen species recovery time, or hasten the demise of these species much more so than for species that are abundant. For this reason, the population-level and social values of [ESA-listed species] losses are likely to be disproportionately higher than the absolute number of losses that occur. Unfortunately, available quantitative and qualitative data on the effects of CWIS on [ESA-listed] species are extremely limited. However, it is known that adverse effects of CWIS on [ESA-listed] species may occur in several ways:

- Individual organisms among [ESA-listed] species may suffer direct mortality as a consequence of impingement and entrainment. This direct loss of individuals may be particularly important because [ESA-listed] species have severely depressed population levels that are approaching local, national, or global extinction.
- Individuals may suffer injury, which may reduce survival probability, reproductive potential and fitness.
- [ESA-listed] species may suffer indirect harm if the CWIS substantially alters the



food web in which these species interact. This might occur as a result of altered populations of predator or prey species, the removal of foundation species, or (for species with parasitic life history stages) the loss of host species.”

The biological evaluation provided limited data regarding the effect of impingement and entrainment on ESA-listed species. However, we were able to accumulate some information from a small subset of facilities that have completed section 7 consultations or habitat conservation plans regarding the effect of impingement and entrainment to sea turtles. We analyzed data from 14 facilities representing 7 to 33 years of monitoring per facility. Annual entrapment at each facility ranged from 0 to 949 turtles. For all facilities during all years, a total of 15,595 turtles were entrapped, an average of 46 turtles per facility per year (standard deviation = 165). The annual number of deaths at each facility was between 0 to 28 turtles. Data presented by the facilities for all years indicated that a total of 385 entrapped turtles died. This data represents a minimized impact on sea turtles that can be expected from impingement and entrainment, as the facilities summarized here had worked with NMFS through the ESA section 7 or the section 10 process to reduce their impacts on sea turtles. For further information on potential impacts to sea turtles, see Appendix C.

While quantitative and qualitative data on the effects of CWIS on the suite of ESA-listed species that may be affected by implementation of the Rule is limited, effects to more common species have been documented through

various monitoring studies conducted at individual facilities. These studies provide further insight as to the effect impingement and entrainment may have on federally-listed species. For example, Bay Shore Power Plant located on Lake Erie near the mouth of the Maumee River conducted an impingement and entrainment study in 2005 and 2006. At the time of the study, the plant took in an estimated 638 million gallons of water/day for cooling water purposes (Ager et al 2008). The study estimated over 2.2 billion larval fish (approximately 10 percent of the larval population in the river), 208 million fish eggs, and 13 million juvenile fish were entrained on an annual basis. Additionally, an estimated 46 million fish were impinged annually (Ager et al 2008). While four species comprised the majority of entrainment and impingement losses, over 50 different species of fish were impinged or entrained during the course of the study.

An ecological assessment prepared by the U.S. Army Corps of Engineers (USACE) for the Upper Mississippi River and Illinois Waterways in 2000 provides a summary of the aggregate effects of impingement and entrainment from multiple facilities along a watercourse. The assessment contained a review of impingement and entrainment rates of fish attributed to 40 power plants. Eleven of the 40 plants had studies on impingement and/or entrainment rates, with most studies being 15 to 20 years old (West 2000). From the data available, the USACE estimated six of the power plants accounted for over 64 million fish entrained and over 56 million fish impinged on an annual basis (West 2000). Similar to the Bay Shore study, over 50 different species of fish were impacted, but a smaller set of species accounted for over 50 percent of impingement and entrainment losses

(West 2000). In both instances, species considered relatively common comprised the majority of individuals impinged or entrained.

These studies illustrate the large number of species and individuals that may be impinged and entrained at a single facility, or through the combination of multiple facilities along a watercourse. So it is likely that any CWIS operating in the vicinity of listed aquatic organisms will cause impingement or entrainment of species protected under the ESA (see Appendix C for species under NMFS jurisdiction).

With regard to salmonids, we know that without screens and bypass systems, impingement (and resulting mortality) is more likely. Automatically cleaned screens with low approach velocity (less than 0.4 ft/s), small screen face openings (3/32" circular or square, or 1.75 mm continuous slots or rectangular openings) and bypass systems designed for fish swimming ability and behavioral traits, typically avoid most juvenile salmonid fish impingement or entrainment, and should be used anywhere juvenile salmonids could be present. With inadequate screen submergence, the water velocity directly between the water surface and the top of the screen can exceed the juvenile salmon swimming ability, potentially capturing fish above the screens until they fatigue or become prey.

EPA acknowledges the potential for impingement and entrainment to lengthen ESA-listed species recovery time, or hasten their demise. Effects to individuals include: death, injury, and indirect effects (e.g., resulting from trophic cascades). In the biological evaluation, EPA explains that it is unable to quantify the extent of the stressors, as a result of limited data. The

Services agree with EPA that implementation of the standards set forth in this Rule reduces the impingement/entrainment of listed organisms. The Services also acknowledges that the ultimate extent of such impingement/entrainment is likely to be reduced by implementation of this Rule when compared to the extent that pre-dates the effective date of the Rule (i.e., prior to regulation by EPA). Upon taking effect, all facilities covered by the Rule will be required to comply with the Rule and therefore the appropriate effects analysis for this Opinion is to ask whether the levels of impingement/entrainment that will exist after the Rule takes effect and is implemented through NPDES permits are consistent with the obligations of section 7(a)(2) of the ESA.

The Rule requires owners and operators to provide any previously conducted entrainment performance studies as an information requirement of all existing facilities so the Director can establish site-specific entrainment standards. Additionally, facilities that withdraw more than 125 million gallons of cooling water/day must submit as part of their permit application, an entrainment characterization study that includes a minimum of 2 years of entrainment data collection. While the Rule does not require monitoring for impingement or entrainment for ESA-listed species at any facilities, the Director may establish additional monitoring for impingement, and the Director may also establish monitoring requirements for entrainment on a site-specific basis. Director determinations of monitoring may include recommendations provided by the Services as a result of their review of permit applications. The Rule also states that where the Director requires additional

measures to protect federally-listed threatened or endangered species pursuant to 125.94(g) of the Rule, the Director shall require monitoring associated with those measures. Allowing the Services to provide the Director impingement and entrainment monitoring recommendations tailored to address site-specific and species-specific issues will help address the following concerns associated with current monitoring efforts as identified in the biological evaluation:

- Because of the low population densities of ESA-listed species and the small volume of water sampled for impingement and entrainment studies, it is likely that many impinged or entrained individuals are never recorded;
- Species identification is difficult at early life history stages (e.g., egg, larvae), which comprise a large proportion of organisms impinged or entrained; and
- At facilities using fish return technology, individuals returned to the waterbody may not be recorded and the condition of the returned individuals is unknown.

In summary, EPA, in their biological evaluation, acknowledges that impingement and entrainment have the potential to either lengthen species recovery time, increase the number of deaths/injuries to ESA-listed species, or increase their extinction risk. EPA also acknowledges that most facilities overlap with at least one ESA-listed species or designated critical habitat. Lastly, EPA stipulates that it cannot quantify the effects of impingement and entrainment at this time due

to limited data. The Rule does not establish monitoring requirements for the impingement or entrainment of ESA-listed species and designated critical habitat. Rather, the Rule establishes a process that allows the Director to work with the Services to determine if additional measures are necessary to reduce impacts to federally-listed species and designated critical habitat and if so, to determine the associated monitoring requirements. If the Director chooses to not include the measures and associated monitoring requirements in the permit and the Services have concerns that a permit will have more than minor detrimental effects on federally-listed species or critical habitat and contact EPA with their concerns, EPA has committed to the following:

- i. EPA will coordinate with the State or Tribe to ensure that the permit will comply with all applicable CWA requirements and will discuss appropriate measures protective of federally-listed species and critical habitat;
- ii. EPA will work with the State or Tribe to reduce or remove the detrimental impacts of the permit, including, in appropriate circumstances, by objecting to and federalizing the permit where consistent with EPA's CWA authority; and
- iii. EPA will exercise the full extent of its CWA authority, to object to a permit proposed by a State where EPA finds (giving deference to the views of the Services) that a State or Tribal permit is likely to jeopardize the continued existence of such species or result in the destruction or adverse modification of such critical habitat.

- o Based on correspondence received from EPA on April 8, 2014, EPA will give deference to the views of the Services with regard to effects on federally-listed fish and wildlife resources.

To date, EPA has not been able to reliably estimate the impact of impingement and entrainment associated with CWIS operations on federally-listed species or critical habitat. However, the process of information exchange required in the Rule and EPA's commitment to the oversight of that process as described above will allow EPA to more reliably estimate stressors associated with impingement and entrainment that are likely to be produced as a direct or indirect result of CWIS operations subject to the Rule. In addition, the process committed to in the Rule also will ensure that any effects from stressors that have more than minor detrimental effects or that rise to the level of jeopardizing a listed species or adversely modifying critical habitat will be addressed through State incorporation of appropriate measures into State permits, EPA's work with the State or Tribe to reduce or remove the minor detrimental impacts, including in appropriate circumstances by objecting to and federalizing the permit consistent with EPA's CWA authority, or EPA's commitment to exercise the full extent of its CWA authority to object to a permit proposed by a State where EPA finds (giving deference to the views of the Services) that a State or Tribal permit is likely to jeopardize the continued existence of such species or result in the destruction or adverse modification of such critical habitat.

**Thermal discharges**

Thermal discharges are regulated under sections 301, 306, or 316(a) of the CWA to protect a balanced indigenous population of shellfish, fish and wildlife in and on the water. While those sections of the CWA are not subject to this consultation, thermal discharges from facilities operating a CWIS regulated under this Rule are an interrelated action and thermal discharges are known stressors on aquatic environments.

As described in the biological evaluation, studies have shown that thermal discharges may substantially alter the structure of the aquatic community by modifying photosynthetic (Bulthuis 1987; Chuang et al. 2009; Martinez-Arroyo et al. 2000; Poornima et al. 2005) metabolic, and growth rates (Leffler 1972), and reducing levels of dissolved oxygen. Thermal pollution may also alter the location and timing of fish behavior including spawning (Bartholow et al. 2004), aggregation, and migration (USEPA 2002), and may result in thermal shock-induced mortality for some species (Ash et al 1974; Deacutis 1978; Smythe and Sawyko 2000). Thus, thermal pollution is likely to alter the ecological services provided by ecosystems surrounding facilities returning heated cooling water into nearby waterbodies.

Thermal discharge limitations vary by State, but typically discharges have to remain below 90°F. A study conducted in 2008 found that over 350 power plants across 14 different states reported discharges exceeding this threshold (Averyt et al. 2011). Large fish kills attributed to an exceedance of thermal discharges at power plants have been documented (NCDWQ 2010, Schwarzen, C. 2000 in Averyt et al 2011). Many common species of fish cannot tolerate water temperatures



that exceed 90°F, and for many species of trout, water temperatures that exceed 80°F can be fatal (Seaby and Henderson 2007, Skaggs et al 2012). “Heat death” in fish occurs when temperatures of fish rise to a level where coordination in the central nervous system begins to break down (Seaby and Henderson 2007).

Dissolved oxygen likely plays a key role in temperature tolerance (Niklitschek 2001). Water temperature and dissolved oxygen levels are related, with warmer water generally holding less dissolved oxygen. In summer, the coupling of low dissolved oxygen at depth and water temperatures greater than 20°C above the thermocline limits non-stressful habitat due to a temperature-oxygen habitat squeeze (Coutant 1987). Sturgeon, for example, are more sensitive to low level dissolved oxygen conditions than some other fishes and become stressed in hypoxic conditions (generally under 5 mg/L), which may limit growth, metabolism, activity, and swimming (Cech et al. 1984, Secor and Gunderson 1998, Secor and Niklitschek 2001, Secor and Niklitschek 2002, Cech and Crocker 2002, Campbell and Goodman 2004).

In summary, EPA acknowledges in the biological evaluation that temperature is “. . . a master environmental variable for aquatic ecosystems, affecting virtually all biota and biologically mediated processes, chemical reactions, as well as structuring the physical environment of the water column.” As described above, thermal discharges are regulated under sections 301, 306, or 316(a) of the CWA and thus, the Rule does not establish control measures or monitoring requirements for habitats of ESA-listed species or designated critical habitat impacted by thermal discharges. However, as thermal discharges are an indirect effect of CWIS operations,

and the Rule allows Directors to base their determination of site specific entrainment requirements on the benefits of reducing thermal discharge impacts, Directors may require additional measures, monitoring and reporting under 316(b) to conserve federally-listed species or designated critical habitat. Measures established by the Director may reflect recommendations made by the Services during either the 60-day review or the public comment period. If the owner or operator or the Director choose not to incorporate Services' recommended measures, and the Services contact EPA with concerns that the permit may cause more than minor detrimental effects to federally-listed species or critical habitat, then EPA will exercise its oversight authority, consistent with the Preamble to the Rule as clarified in the April 8, 2014 correspondence (Appendix A). To date, EPA has not been able to reliably estimate the impact of thermal discharge associated with CWIS operations on federally-listed species or designated critical habitat. However, more information will now be generated as the Rule promotes the exchange of information or technical assistance between the Services and the Directors. EPA now commits to the oversight of that process, which will allow EPA to more reliably estimate the physical, chemical, or biotic stressors that are likely to be produced as a direct or indirect result of thermal discharge activities.

**Flow alteration**

As described in the biological evaluation, the operation of CWIS, including water withdrawals and discharge returns, significantly alters patterns of flow within receiving waters, both in the immediate area of the CWIS intake and discharge pipe and in mainstream waterbodies. In ecosystems with strongly delineated boundaries (i.e., rivers, lakes, enclosed bays, etc.), CWIS may withdraw

and subsequently return a substantial proportion of water available to the ecosystem. For example, of 521 facilities located on freshwater streams or rivers, 164 (31 percent) have an average intake greater than 5 percent of the mean annual flow of the source waters (USEPA 2013c). Based on the ratio of water demand to water supply, power plants are the major drivers of water stress in 44 basins across the United States (Skaggs et al. 2012). As EPA describes in the biological evaluation, such withdrawals are likely to have significant impact on the aquatic habitat, in general, and on ESA-listed species and designated critical habitat, especially in inland riverine environments.

All withdrawals are likely to alter flow characteristics of the waterbody including turbulence and water velocity (USEPA 2013c). As described in the biological evaluation, altered flow velocities and turbulence may lead to several changes in the physical environment, including: sediment deposition (Hoyal et al. 1995), sediment transport (Bennett and Best 1995), and turbidity (Summer et al. 1996), each of which play a role in the physical structuring of ecosystems. Biologically, flow velocity is a dominant controlling factor in aquatic ecosystems. Flow has been shown to alter feeding rates, settlement and recruitment rates (Abelson and Denny 1997), bio-turbation activity (Biles et al. 2003), growth rates (Eckman and Duggins 1993), and population dynamics (Sanford et al. 1994).

In addition to flow rates, turbulence plays an important role in the ecology of small organisms, including fish eggs and larvae, phytoplankton, and zooplankton. In many cases, the turbulence of a waterbody directly affects the behavior of aquatic organisms, including fish,

with respect to swimming speed (Lupandin 2005), location preference with a waterbody (Liao 2007), predator-prey interactions (Caparroy et al. 1998; MacKenzie and Kiorboe 2000), recruitment rates (MacKenzie 2000; Mullineaux and Garland 1993), and the metabolic costs of locomotion (Enders et al. 2003). The sum of these effects may result in changes to the food web or the location of used habitat, and thereby substantially alter the aquatic environment (USEPA 2013).

In the biological evaluation, EPA also acknowledges that flow alteration as a result of CWIS operation is likely to change over time as a result of climate change. Climate change is predicted to have variable effects on future river discharge in different regions of the United States, with some rivers expected to have large increases in flood flows, while other basins will experience water stress. For example, Palmer et al. (2008) predict that mean annual river discharge is expected to increase by about 20 percent in the Potomac and Hudson River basins, but to decrease by about 20 percent in Oregon's Klamath River and California's Sacramento River.

To summarize, in the biological evaluation, EPA states that CWIS may alter habitat that is essential to the long-term survival of ESA-listed species as a result of altered flow regimes or turbidity. Flow alterations may be caused by all degrees of withdrawals, not just those that withdraw a significant proportion of the mean annual flow of source waters. To date, EPA has not been able reliably estimate the effects of flow alteration on ESA-listed species and critical habitat. While the Rule does not establish control measures or monitoring and reporting requirements to reduce the effects of flow alteration on ESA-listed species and designated critical

habitat, it does establish a process that allows the Director to work with the Services to determine the benefits of reducing impacts of flow alteration and in determining appropriate controls under section 316(b), including those that conserve ESA-listed species. If additional measures are necessary, the Services will be able to provide appropriate monitoring and reporting recommendations. The Director may then include these measures, monitoring, and reporting in the permit. If a State or Tribal Director chooses to not include the measures and associated monitoring requirements in the permit and the Services have concerns that a permit will have more than minor detrimental effects on federally-listed species or critical habitat and contact EPA with their concerns, EPA has committed to the following:

- i. EPA will coordinate with the State or Tribe to ensure that the permit will comply with all applicable CWA requirements and will discuss appropriate measures protective of federally-listed species and critical habitat
- ii. EPA will work with the State or Tribe to reduce or remove the detrimental impacts of the permit, including, in appropriate circumstances, by objecting to and federalizing the permit where consistent with EPA's CWA authority; and
- iii. EPA will exercise the full extent of its CWA authority, to object to a permit proposed by a State where EPA finds (giving deference to the views of the Services) that a State or Tribal permit is likely to jeopardize the continued existence of such species or result in the destruction or adverse modification of such critical habitat.

- o Based on correspondence received from EPA on April 8, 2014, EPA will give deference to the views of the Services with regard to effects on federally-listed fish and wildlife resources.

The technical assistance process facilitated by the exchange of information as required in the Rule and EPA's commitment to the oversight of that process as described above will allow EPA to more reliably estimate stressors associated with flow alterations that are likely to be produced as a direct or indirect result of CWIS operations subject to the Rule.

#### **Chemical discharges**

As described in the biological evaluation, contaminated effluent is a byproduct of once-through cooling water systems. Chemical discharges are addressed in NPDES permits by either water quality-based effluent limitations or technology-based effluent limitations of the CWA. We consider chemical discharges in this consultation, because in the biological evaluation, EPA identifies chemical discharges as a stressor produced by operation of CWIS that fall under the purview of this Rule.

In the biological evaluation, EPA explains that toxic pollutants, such as metals, polycyclic aromatic hydrocarbons, pesticides, biofouling chemicals, or chlorine may be present in the discharge of CWISs. They conclude that such chemical discharges could lead to local extirpation of sensitive species, or to greatly altered biological communities due to chronic impacts on viability, growth, reproduction, and resistance to other stressors (USEPA 2013). To date, EPA has not been able to reliably estimate the effects of chemical discharges on

ESA-listed species and designated critical habitat, as environmental monitoring and data collection has not been required from all facilities. The Rule does not establish specific control measures or monitoring and reporting requirements to reduce the effects of chemical discharge on ESA-listed species and designated critical habitat; however, it does establish a process that allows the Director to work with the Services to determine the benefits of reducing impacts of chemical discharge and in determining appropriate controls under section 316(b), including those that conserve ESA-listed species. If additional measures are necessary, the Services will be able to provide appropriate monitoring and reporting recommendations. The Director may then include these measures, monitoring, and reporting in the permit. If the Director chooses to not include the measures and associated monitoring requirements in the permit and the Services have concerns that a permit will have more than minor detrimental effects on federally-listed species or critical habitat and contact EPA with their concerns, EPA has committed to EPA has committed to the following:

- i. EPA will coordinate with the State or Tribe to ensure that the permit will comply with all applicable CWA requirements and will discuss appropriate measures protective of federally-listed species and critical habitat;
- ii. EPA will work with the State or Tribe to reduce or remove the detrimental impacts of the permit, including, in appropriate circumstances, by objecting to and federalizing the permit where consistent with EPA's CWA authority; and

- iii. EPA will exercise the full extent of its CWA authority, to object to a permit proposed by a State where EPA finds (giving deference to the views of the Services) that a State or Tribal permit is likely to jeopardize the continued existence of such species or result in the destruction or adverse modification of such critical habitat.
  - o Based on correspondence received from EPA on April 8, 2014, EPA will give deference to the views of the Services with regard to effects on federally-listed fish and wildlife resources.

The technical assistance process facilitated by the exchange of information between the Director and the Services as required in the Rule, and EPA's commitment to the oversight of that process as described above will allow EPA to more reliably estimate stressors associated with chemical discharge that are likely to be produced as a direct or indirect result of CWIS operations subject to the Rule.

#### **Aggregate Impacts**

As described in the biological evaluation, cumulative impacts are the magnified environmental stressors created by regulated CWIS when two or more facilities are located nearby (USEPA 2013c). To avoid confusion with the regulatory definition of cumulative effects, we use the term "aggregate impacts." Aggregate impacts are likely to occur if multiple facilities are located in close proximity, such that they impinge or entrain aquatic organisms within the same source waterbody, watershed system, or along a migratory pathway of a specific species (e.g., striped bass in the Hudson River)



(USEPA 2004). Aggregate impacts include the magnified effects of indirect effects associated with the operation of CWISs of two or more facilities.

EPA estimates that approximately 20 percent of potentially regulated facilities are located on waterbodies with multiple CWIS (USEPA 2004). Review of geographic locations of 316(b) facilities (approximated by CWIS latitude and longitude) indicates that facilities in inland settings are clustered around rivers to a greater extent than marine and estuarine facilities (USEPA 2013c). In the biological evaluation, EPA explains that aggregate impacts of clustered facilities may be significant, due to concentrated impingement and entrainment mortality, combined intake flows, and the potential for other impacts such as thermal or chemical discharges and flow alterations. EPA also notes that power generation demand and cooling intake water volume is typically at its annual maximum during mid-late summer, which is also a period of seasonal low flows and highest in-stream temperatures. Although low flows traditionally occur in late summer to early fall, drought conditions and manipulations of water levels may lead to low flow during other periods as well. Low flow is problematic when it overlaps with seasonal concentrations of eggs, developing young of the years, and migrating juveniles or adults (USEPA 2013c). EPA estimates that aggregate impacts may be greater in inland waters due to the following factors:

- the majority of national annual intake flow is associated with freshwater CWIS;
- freshwater plants use a greater relative volume of available fish habitat than marine or estuarine counterparts; and

- seasonal variation in power demand and river flow may increase entrainment potential during low-flow periods of the year (NETL 2009).

To summarize, in the biological evaluation, EPA acknowledges that the stressors described above are magnified when two or more facilities are located in close proximity; approximately 20 percent of facilities are located in waterbodies with multiple CWIS; and most facilities overlap with at least one ESA-listed species. Because the above stressors have the potential to lengthen species recovery time, hasten the demise of these species, or alter habitat that is critical to long-term survival, magnification of such stressors has a greater potential to jeopardize the continued existence of listed species and adversely modify critical habitat.

To date, EPA has not been able know or reliably estimate the aggregate impacts of CWIS operations on ESA-listed species and critical habitat. While the Rule does not establish control measures or monitoring and reporting requirements to reduce aggregate impacts from CWIS on ESA-listed species and designated critical habitat; it does establish a process that allows the Director to work with the Services to determine if additional measures are necessary to reduce aggregate impacts and if so, to determine the associated monitoring reporting requirements. The Director may then include these measures, monitoring, and reporting in the permit. If the Director chooses to not include the measures and associated monitoring and reporting requirements in the permit and the Services have concerns that a permit will have more than minor detrimental effects on federally-listed species or critical habitat and contact EPA with their concerns, EPA has committed to the following:

- i. EPA will coordinate with the State or Tribe to ensure that the permit will comply with all applicable CWA requirements and will discuss appropriate measures protective of federally-listed species and critical habitat;
- ii. EPA will work with the State or Tribe to reduce or remove the detrimental impacts of the permit, including, in appropriate circumstances, by objecting to and federalizing the permit where consistent with EPA's CWA authority; and
- iii. EPA will exercise the full extent of its CWA authority, to object to a permit proposed by a State where EPA finds (giving deference to the views of the Services) that a State or Tribal permit is likely to jeopardize the continued existence of such species or result in the destruction or adverse modification of such critical habitat.
  - o Based on correspondence received from EPA on April 8, 2014, EPA will give deference to the views of the Services with regard to effects on federally-listed fish and wildlife resources.

**Summary**

Stressors associated with the operation of CWIS as described above have the potential to significantly affect federally-listed species and designated critical habitat. EPA has structured the Rule to more reliably estimate these physical, chemical, or biotic stressors as they relate to federally-listed species and designated critical habitat. For permits issued by EPA on a facility by facility basis, EPA is likely to know or reliably estimate the physical, chemical, or biotic stressors that are likely

to be produced as a direct or indirect result of activities as they are required to consult with the Services through the section 7(a)(2) process if the action may affect \* \* \* .

\* \* \* \* \*