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6 Attorneys for Respondents
CALIFORNIA DEPARTMENT OF WATER
7 RESOURCES, an agency of the State of California,
LESTER SNOW, an individual in his official
8 capacity, RALPH TORRES, an individual in his
official capacity, DAVID STARKS, an individual
9 in his official capacity, DAVID DUVAL, an
individual in his official capacity, and L.D.
10 ELMORE, an individual in his official capacity

11
12 SUPERIOR COURT OF THE STATE OF CALIFORNIA
13 COUNTY OF ALAMEDA

14 WATERSHED ENFORCERS, a project of
15 CALIFORNIA SPORTFISHING
PROTECTION ALLIANCE, a non-profit
16 corporation,

Petitioner,

17 v.
18

19 CALIFORNIA DEPARTMENT OF
WATER RESOURCES, an agency of the
20 State of California, LESTER SNOW, an
individual in his official capacity, RALPH
21 TORRES, an individual in his official
capacity, DAVID STARKS, an individual in
22 his official capacity, DAVID DUVAL, an
individual in his official capacity, and
23 L.D. ELMORE, an individual in his official
capacity,

24 Respondents.
25

CASE NO. RG06292124

**DECLARATION OF CARL
TORGERSEN IN SUPPORT OF
REQUEST FOR HEARING**

Date: TBD
Time: TBD
Dept: 31
Judge: Hon. Frank Roesch

**[NO FILING FEE REQUIRED
PURSUANT TO GOV'T CODE
§ 6103]**

1 I, Carl Torgersen, declare as follows:

2 1. I am employed by the Department of Water Resources (“DWR”) as Chief of the
3 Division of Operations and Maintenance (“O&M”). I have been the Chief of O&M since July 1,
4 2006. I am responsible for managing and supervising work related to the planning, scheduling
5 and executing of water and power operations of the State Water Project (“SWP”) that occur in the
6 Sacramento/San Joaquin Delta (Delta), including the Harvey O. Banks Delta Pumping Plant
7 (Banks Pumping Plant), Skinner Fish Protection Facility, and the Clifton Court Forebay. This
8 includes operational compliance for protection of species, water quality standards, and water
9 level requirements.

10 2. Prior to taking the position as the Chief of O&M, I was Chief of SWP Operations
11 from November 2000 through June 2006. I have worked in the industry of water services for 26
12 years. I have a Bachelor’s degree in Mechanical Engineering and I am a registered Mechanical
13 Engineer in the State of California. I am familiar with the service areas where the SWP provides
14 water under DWR’s the long-term water supply contracts, the limitations of those areas and the
15 significant statistical and economical data affecting those areas. I work with a team of scientists,
16 economists, engineers and water-industry specialists who advise and assist me in the daily
17 decision-making necessary to operate the SWP. I have personal knowledge of the facts stated
18 herein, and, if called to do so, could and would testify competently thereto.

19 **OVERALL IMPACTS ON WATER DELIVERY FROM**
20 **HARVEY O. BANKS PUMPING PLANT**

21 3. The SWP delivers raw water under long-term water supply contracts to twenty-
22 nine agricultural, municipal, and industrial public entities throughout California. Twenty-four of
23 these contractors are located south of the Delta and depend on delivery of their SWP water being
24 pumped from the Banks Pumping Plant.

25 4. The amount of SWP water allocated is driven by hydrological conditions, SWP
26 storage, and contractor demand in a given year. Over 3.6 million acre-feet of SWP water was
27 delivered to the SWP contractors in 2006. Almost all of this water is moved through Banks

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1 Pumping Plant for delivery to support irrigation of 750,000 acres of farmland and the needs of 25
2 million Californians.

3 5. Annually, DWR determines the amount of SWP water that can be provided to each
4 contractor based on each contractor's request and hydrological conditions. The amount delivered
5 to each depends on the contract Table A amount in their long-term water supply contract with
6 DWR. Delivery of the Table A amount is not assured, but rather provides the basis for
7 proportional allocation of available water among contractors. In wet years, DWR is able to
8 deliver a greater percentage of the contractors' requests.

9 6. The contractors requested about 4 million acre-feet for 2007. The estimates of
10 water need and water availability varies each water year depending on precipitation in the
11 Sacramento, Feather, and San Joaquin River watersheds, water storage, the demand from other
12 water users, and regulatory constraints. In November 2006, DWR notified its water contractors
13 that in 2007 it would allocate 60 percent of the total contractor requests or 2.4 million acre-feet
14 (MAF), as indicated on the attached Exhibit A "Notice to SWP Contractors".

15 7. If the court ordered DWR to cease pumping at the Banks Pumping Plant, DWR
16 would have to deliver SWP water that is stored in reservoirs south of the Delta, such as Del Valle
17 Reservoir, San Luis Reservoir, Lake Perris, Castaic Lake, and Silverwood Lake, until such time
18 that the supplies were exhausted. Under different operational models, these stored water
19 resources could be depleted and the replacement of SWP water with other surface water and
20 groundwater would be required, which would likely result in long-term water quality and
21 environmental problems as discussed below. Using these operational models, DWR prepared a
22 Delta contingency plan assuming curtailment of Banks Pumping Plant in June 2007 and
23 extending for 18 months. Under this model, DWR would reduce its current allocation of water of
24 2.4 MAF to 0.64 MAF, reducing the allocation to 16% of the contractors' total requests. Under
25 the assumption of six months of cessation at the Banks Pumping Plant DWR informed its
26 contractors that their SWP allocations could be reduced to 27 percent of the contract amounts.

27 8. At the same time, California energy managers would not be able to rely on the
28 summer-time super-peak period generating capacity of the SWP of up to 450 mega-watts per hour

1 and the flexibility that this generation provides. If pumping from the Banks Facility is stopped,
2 the SWP Oroville Facilities (which include Oroville and Thermalito dams, reservoirs, and
3 powerplants) would be making releases for regulatory requirements and would not be releasing
4 water for export delivery at Banks Pumping Plant. As a result, hydro-power generation at the
5 Oroville Facilities would be reduced. This could drastically impact the SWP's ability to support
6 energy reliability as was the documented case during last July's heat wave.

7 9. Economic and environmental impacts of a cessation in SWP Delta pumping at the
8 Banks Pumping Plant are difficult to quantify, but would be severe.

9 10. If DWR ceased pumping of water at Banks Pumping Plant, this would result in
10 less water in SWP lakes and reservoirs, as SWP contractors would require water from these
11 sources. This would likely impact recreational activities over the summer and fall months. As
12 the lakes are drawn down and not refilled, less water will cause increased concentrate pathogens
13 and could reduce water quality and prevent or impair swimming and other recreational water
14 activities. Degraded water quality could also harm fish and other wildlife dependent on the
15 water.

16 11. Additionally, south-of Delta water users will be vulnerable to shortages in local
17 water supplies this year caused by dry water conditions throughout California. There will be an
18 over-reliance on groundwater for many water districts that normally rely on a combination of
19 water from the SWP and other sources.

20 GROUND WATER DEPLETION

21 12. The long-term impacts of increased groundwater use in place of SWP water
22 deliveries may be substantial. As the groundwater table is drawn downward, especially if this
23 year is followed by an extended drought, land subsidence may occur and the storage capacity of
24 the aquifer (underground storage reservoir) could be permanently reduced.

25 13. Impacts related to groundwater substitution include pumping costs, increased
26 energy costs, air quality problems from using diesel pumps, and added water costs to recharge the
27 aquifer. As groundwater levels drop, wells may need to be drilled deeper and pumps reset or
28 possibly replaced to overcome the additional pumping head.

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2 14. If the Banks Pumping Plant remained off, all of DWR's south-of-Delta storage
3 would likely be drawn down. San Francisco Bay Area contractors could be faced with over-
4 reliance on groundwater. As groundwater use increases for coastal contractors, the potential for
5 salt water intrusion in local aquifers increases with potential for permanent damage and reduction
6 in ground water storage capacity.

7 15. During this time, SWP agricultural customers in the San Joaquin Valley would
8 rely on local water supplies that consist of primarily groundwater, causing further overdraft of
9 these aquifers.

10 **IMPACTS TO COMMUNITIES RECEIVING LESS WATER**

11 16. Many of the twenty-four SWP contractors that depend on water south of the Banks
12 Pumping Plant provide municipal water supplies. Stopping delivery of water through the Banks
13 Pumping Plant will drastically impact the ability of these agencies to provide water to their
14 customers.

15 **SOUTHERN CALIFORNIA SWP CONTRACTORS**

16 17. The Metropolitan Water District of Southern California ("MWD" or Metropolitan)
17 is the largest contractor of SWP water, delivering to a service area of 5,200 square miles,
18 including the Counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and
19 Ventura. Metropolitan's annual SWP contract amount is for 1.91 million acre-feet. Based on the
20 sixty-percent allocation, DWR approved delivering 1.15 million acre-feet to MWD.

21 Metropolitan provides an average of fifty-five percent of the total water needed in this service
22 area including water for 18 million people, approximately one-half the population of California.

23 18. Another Southern California contractor that will be impacted is the Castaic Lake
24 Water Agency, which serves an estimated population of 225,000. Castaic has a contract for
25 95,200 acre-feet annually and this year is allocated 57,100 based on the sixty-percent allocation.

26 19. The Antelope Valley-East Kern Water Agency has a SWP contract amount for
27 141,000 acre feet to serve over twenty small municipalities and this year is allocated 84,800 acre
28 feet at the sixty-percent. The District provides water to the Edwards Air Force Base.

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2 20. The Palmdale Water District, 60 miles north of the City of Los Angeles
3 encompassing 140 square miles. Palmdale Water District has a SWP contract amount for 21,300
4 acre-feet and this year is allocated 12,800 acre-feet base on the sixty-percent allocation.

5 21. Additional SWP water agencies impacted in the Southern region include the
6 Mojave Water Agency, San Bernardino Valley Municipal Water District, Desert Water Agency,
7 Coachella Valley Water District and the San Gorgonio Pass Water Agency. Combined these
8 agencies have SWP long-term contracts for about 357,000 acre-feet and this year are allocated
9 214,000 acre feet at sixty-percent.

10 SOUTH-BAY AQUEDUCT SWP CONTRACTORS

11 22. The South Bay Aqueduct receives SWP water after it is pumped from the Banks
12 Pumping Plant. SWP contractors connected to the South Bay Aqueduct are Alameda County
13 Flood Control and Water Conservation District, Zone 7; Alameda County Water District; and the
14 Santa Clara Valley Water District.

15 23. Zone 7 has a SWP contract amount of 80,600 acre-feet and serves an estimated
16 population of 200,000, including the City of Livermore, the City of Pleasanton, and the Dublin-
17 San Ramon Services District. DWR has approved delivery of 48,400 acre-feet this year. SWP
18 water comprises 80 percent of its total water supply. Zone 7 is also the sole direct source of
19 water supply to the Veterans Administration Medical Center in Livermore, Camp Parks Military
20 Base, Alameda County Santa Rita Jail, facilities of Livermore Recreation and Parks District and
21 the Dublin Housing Authority.

22 24. The Alameda County Water District has a SWP contract amount of 42,000 acre-
23 feet and supplies water to a service area of approximately 100 square miles encompassing the
24 cities of Fremont, Newark and Union City. DWR has approved delivery of 25,000 acre-feet this
25 year to the District. This District provides drinking water to a population over 320,000 people
26 and is the sole source of water to numerous businesses, industries, schools and hospitals in its
27 service area. Approximately 40% of the District's water supplies are imported from the SWP.

28 25. The Santa Clara Valley Water District serves a population of over 1.7 million in

1 the cities of Palo Alto, Mountain View, San Jose, Sunnyvale, Milpitas, Cupertino, Los Gatos,
2 Morgan Hill and Gilroy. This District has a contract amount of 100,000 acre-feet and will
3 receive 60,000 acre-feet this year under its approved delivery allocation. Nearly one-half of the
4 District's water is imported from the SWP.

5 COASTAL AQUEDUCT SWP CONTRACTORS

6 26. SWP contractors serving municipalities that receive deliveries through the Coastal
7 Aqueduct south of the Banks Pumping Plant will be impacted and include the San Luis Obispo
8 County Flood Control and Water Conservation District and the Santa Barbara County Flood
9 Control and Water Conservation District.

10 27. The San Luis Obispo County Flood Control and Water Conservation District
11 serves a population of roughly 255,000 and has a SWP contract amount of 25,000 acre-feet and
12 this year is allocated approximately 4,100 acre-feet.

13 28. The Santa Barbara County Flood Control and Water Conservation District serves a
14 population of roughly 432,000 and has a contract amount of 45,000 acre-feet. It will receive
15 27,300 acre-feet of water under the 60% allocation. The cities of Santa Maria, Buellton and two
16 other water districts in that service area will not meet basin water quality objectives without
17 receiving water from the SWP.

18 OTHER LOCAL IMPACTS

19 29. Federal Central Valley Project contractors whose water supply is conveyed
20 through Banks Pumping Plant include the San Joaquin Valley National Cemetery and the Korean
21 War Memorial and Musco Olive processing plant. Each of these users will lose all water supplies
22 from the SWP as a result of no pumping at the Banks Pumping Plant.

23 IMPACTS TO FARMING

24 30. The SWP provides water to agencies or districts serving 750,000 acres of
25 California farmland, the vast majority of which is located south of the Delta. If Banks Pumping
26 Plant cannot operate to deliver this water, growers will likely incur costs associated with shortage
27 of water supplies including crop loss or reduced yield. Even if growers are able to secure
28 supplemental supply, such as through groundwater substitution, they will incur higher pumping

1 costs, increased energy costs, and costs to recharge aquifers.

2 31. Crops in the areas served by the SWP with water from the Banks Pumping Plant
3 receive minimal rainfall and are dependent on water applied through irrigation, especially during
4 the hot summer months. Water shortages during this period will likely result in crop loss.

5 32. The irrigation of permanent crops such as fruit, nut trees, grapes, and kiwis is of
6 primary concern because of the high initial investments, their long productive life, and the time
7 required before these plants begin producing. Severe stress due to insufficient irrigation can
8 temporarily and permanently reduce future crop yields.

9 33. Some farmers may have a small window of opportunity to make difficult decisions
10 regarding whether they should continue with this growing season or limit costs. However, the
11 expenditures for preseason irrigation, purchase of seeds, land preparation, and planting typically
12 occur in early spring. If water shortages prevent the crops from maturing, these costs will be lost.

13 34. Several agricultural contractors rely exclusively on SWP water delivered through
14 the Banks Pumping Plant and will be severely impacted. The Oak Flat Water District, Dudley
15 Ridge Water District and Empire West Side Irrigation District all rely heavily on water from the
16 SWP.

17 35. Oak Flat Water District is a SWP agricultural contractor located near Patterson,
18 California. Its service area is approximately 2,150 acres. The SWP is the District's sole surface
19 water source of irrigation water. Because the District's diversion structure on the California
20 Aqueduct is located 45 miles south of Banks Pumping Plant but north of San Luis Reservoir, it
21 cannot rely on San Luis Reservoir's stored SWP supplies and will face economic harm upon
22 cessation of Bank pumping.

23 36. The Dudley Ridge Water District includes approximately 37,600 acres of land in
24 Kings County. This acreage is largely planted with permanent crops with 18,000 acres of
25 almonds, pistachios, pomegranates and grapes. All of these crops are entirely dependent upon the
26 delivery of water from the SWP because the deliveries comprise 100% of the total water supplies
27 available to this District.

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2 37. Long-term farm impacts beyond this growing season could entail the loss of
3 permanent crops, additional costs to develop crop replacements, and the time needed before those
4 crops become mature enough to provide financially viable harvests.

5 **IMPACTS TO THE ENVIRONMENT**

6 38. One of the largest impacts of reduced water to SWP service area water basins is
7 the impact on reservoir fisheries. Less water in the reservoirs translates to less aquatic habitat.
8 Accelerated draw down during sensitive ecological periods (like spawning) can have severe
9 adverse effects on fish populations.

10 39. Cessation of pumping water from the Delta will force water users in areas south of
11 the Delta to use water supplies from local reservoirs, drawing them down to minimum pool
12 storages. Reservoirs lowered for an extended period of time, depending on local rainfall and
13 availability of other sources of water, could result in adverse effects to the environment, as well
14 as recreational uses. An extended reduction in lake levels could result in “dust storms” from the
15 exposure of the lake bed soils to evaporation and wind. These exposed lake beds create “bath
16 tub” rings which are both visually unpleasant and reduce access to the water for recreational uses,
17 such as fishing, boating, water-skiing, and swimming.

18 40. Once the water storage in the lakes, forebays and reservoirs approach lower
19 elevations, oxygen in the water for fish will drop. Because of oxygen depletion, decomposition
20 of algae or other organic matter becomes accelerated and this often results in “fish-kills” of
21 resident fish.

22 41. DWR operates and maintains several reservoirs as part of the SWP, including
23 Lake Perris and Castaic Lake in southern California. A reduction in lake levels at Castaic Lake
24 and Lake Perris would decrease the availability of fish for species dependent on the lakes for
25 food, such as bald-eagles and greater western mastiff bats. An extended reduction in lake levels
26 at Lake Perris would adversely affect the riparian habitat at Lake Perris. This lake is a habitat for
27 several birds of “special status” (California thrasher, Cooper’s Hawk, Lawrence goldfinch, least
28 Bell’s vireo, loggerhead shrike, northern harrier, white tailed kite, yellow warbler).

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2 42. An extended exposure of the shoreline at Castaic Lake and Lake Perris may
3 increase exposure of cultural and paleontological resources, which in turn could increase
4 vandalism, accidental damage, or collection by the public.

5 43. DWR regularly conveys water through the Banks Pumping Plant on behalf of the
6 USBR for its National Wildlife Refuges south of the Delta. A reduction at Banks pumping plant
7 would reduce water to these refuges, degrading their habitat for wildlife.

8 IMPACTS TO POWER GENERATION

9 44. At the Oroville Facilities, the SWP combined Hyatt Pumping-Generating Plant
10 and Thermalito Pumping-Generating Plant (Hyatt-Thermalito) generate about 2.2 billion kWh of
11 energy in a median water year and Thermalito Diversion Dam Power Plant another 24 million
12 kWh of energy a year.

13 45. The energy needed to operate the SWP comes from a combination of its own
14 hydroelectric, long term supply contracts and power purchased and exchanged from other
15 utilities. The DWR power plants produce enough electricity to supply about 60% of the necessary
16 operating power.

17 46. If water is not pumped from the Delta, less water will be released from Oroville
18 Reservoir and hydropower generation will be unavailable. Reduction in generation at the
19 Hyatt/Thermalito Complex is estimated at approximately 767 GWh with a net increase in cost of
20 water delivery to the people of California in the tens of millions of dollars. This Complex
21 produces clean energy and provides essential grid stability for Cal ISO.

22 47. The SWP has sale commitments and exchange obligations for on-peak energy
23 during the summer. These commitments may not be met without SWP full operations, including
24 the Banks Pumping Plant.

25 48. If SWP cannot generate its contractual energy commitments as part of its water-
26 delivery system and must purchase it from the wholesale energy market to cover those
27 obligations, the cost for this replacement power is estimated in the tens of millions of dollars.

28 49. Cal ISO relies on generation from the Hyatt-Thermalito Complex, especially

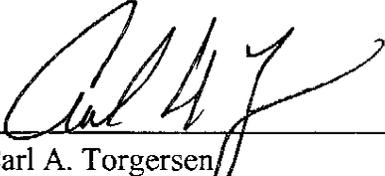
1 during summer months. Cal ISO has already expressed concerns that this year's energy supplies
2 will be as tight as those last year, again looking to SWP for assistance in producing clean energy
3 for the grid.

4 CONCLUSION

5 50. The economic, agricultural and environmental consequences of shutting down the
6 Banks Pumping Plant would be severe, far-reaching, and would adversely impact the State, its
7 citizens and environment, for a significant time into the future. The SWP delivers water that
8 California and its citizens, businesses, farmers, and wildlife rely on and the Banks Pumping Plant
9 is the key facility in the SWP that enables DWR to deliver that water.

10 Executed this 10th day of April 2007 at Sacramento, California.

11 I declare under penalty of perjury under the laws of the State of California that the
12 foregoing is true and correct.

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15 Carl A. Torgersen
16 Chief, Division of Operation and Maintenance
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