



California Department of Fish and Wildlife
Bay Delta Region
7329 SILVERADO TRAIL
NAPA, CA 94558

California Endangered Species Act
Amended Incidental Take Permit No. 2081-2012-012-03
(Amendment No. 2)

**COMMERCIAL SAND MINING BY LIND MARINE
WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY**

Authority: This California Endangered Species Act (CESA) Incidental Take Permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take¹ of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.² CDFW may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, § 783.4).

Permittee:	Lind Marine
Principal Officer:	William H. Butler, Vice President
Contact Person:	William H. Butler, Vice President
Mailing Address:	1175 Nimitz Ave, Suite 120 Vallejo, CA 94592

Amended ITP³ Background

On July 14, 2013, Jerico Products, Inc. submitted a CESA ITP application to CDFW pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. Jerico Products, Inc. sought take coverage authorization for CESA listed species associated with project-related impacts from the Commercial Sand Mining by Jerico Products, Inc. Within the Middle Ground Shoal and Suisun Bay in Solano County, California (Project).

On April 1, 2014, CDFW issued ITP No. 2081-2012-012-03 to Jerico Products, Inc. (Permittee) authorizing take of Central Valley spring-run Chinook salmon (*Oncorhynchus*

¹Pursuant to Fish and Game Code section 86, "'Take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 (for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "'take' ... means to catch, capture or kill").

²"The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game Code sections 2062, 2067, and 2068, respectively.

³When this incidental take permit and attachments refer to the "ITP", it means the "Amended ITP" unless the context dictates otherwise.

tshawytscha), Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*), Delta smelt (*Hypomesus transpacificus*), longfin smelt (*Spirinchus thaleichthys*) (collectively, the Covered Species) associated with and incidental to the Jerico Products, Inc. Within the Middle Ground Shoal and Suisun Bay Project. The Project as described in the ITP originally issued by CDFW includes continuing commercial hydraulic sand mining operations for 10 years in the Middle Ground Island Shoal and Suisun Channel. In issuing the ITP, CDFW found, among other things, that Permittee's compliance with the Conditions of Approval of the ITP would fully mitigate impacts to the Covered Species and would not jeopardize the continued existence of the Covered Species.

On July 18, 2014, Jerico Products, Inc. submitted a request for a "major amendment" to CESA ITP No. 2081-2012-012-03 (See Cal. Code Regs., § 783.6(c)(5)). Since the issuance of the ITP, the Permittee requests amending the language to Condition 7.1 to allow sand mining upstream of the X2 location from December 1 through June 30 and instead restrict and reduce the mining activity and sand mining volumes in Middle Ground Shoal and Suisun Bay in order to avoid and minimize potential losses of larval smelt. The Permittee also requests a change to ITP Condition 8.2 to increase compensatory habitat mitigation to cover any incidental take of larval smelt that cannot be avoided through the ITP minimization and avoidance measures. This Major Amendment No. 1 (Amendment) increased the overall allowable take authorization and makes the following changes to the existing ITP. This Amendment made changes to the smelt work period restrictions (Condition 7.1), limiting the sand mining volume and depth during December 1 through June 30 of each year in the Middle Ground Shoal and Suisun Bay areas. Second, this Amendment added to the compensatory habitat mitigation (Section 8 of the ITP) an additional 0.02 acres of Covered species credits in order to mitigate for potential entrainment and mortality of larval Delta smelt and longfin smelt due to mining activities upstream of the X2 location. Third, this Amendment made additional changes to ITP Section 8 (Habitat Management Land Acquisition and Restoration), including changes to Conditions 8.1 and 8.2, Condition 9.1, and the MMRP, as a result of the first two changes.

On December 29, 2023 (and fees submitted October 2, 2024), Lind Marine (formerly known as Jerico Products, Inc.) submitted a request for a "major amendment" to CESA ITP No. 2081-2012-012-03 (See Cal. Code Regs., § 783.6(c)(5)). The Permittee requests to extend the expiration date of the ITP from December 30, 2023 until April 30, 2026 to be able to continue to conduct mining operations until then. Amendment 2 extends the ITP expiration date until April 30, 2026. CDFW has increased compensatory habitat mitigation requirement by an additional 0.02 acres to cover any incidental take of larval smelt that cannot be avoided through the ITP minimization and avoidance measures.

CDFW now reissues this ITP including the revised provisions in this second major amendment (Collectively, the Amended ITP). The Amended ITP includes all of the operative provisions as of the effective date of this Amended ITP. Attachment 4 to this Amended ITP

Incidental Take Permit
No. 2081-2012-012-03
LIND MARINE.
COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

shows the specific red-line changes made to the original ITP as a result of this major amendment.

Effective Date and Expiration Date of this ITP:

The original ITP was executed in duplicate original form and became effective when a duplicate original was acknowledged by signature of the Permittee on the last page of the original ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. The original ITP's effective date was April 1, 2014 and the expiration date was December 31, 2023. This second amendment to the ITP extends the expiration date until April 30, 2026. This Amended ITP is effective as of the date signed by CDFW below. Unless renewed by CDFW, this Amended ITP's authorization to take the Covered Species shall expire on April 30, 2026.

Notwithstanding the expiration date on the take authorization provided by this Amended ITP, Permittee's obligations pursuant to this Amended ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 6.6 of this Amended ITP.

Project Location:

The Commercial Sand Mining by Lind Marine Inc. within the Middle Ground Shoal and Suisun Bay (Project) has sites located in the Middle Ground Island Shoal and Suisun Channel of Suisun Bay within the counties of Solano, Sacramento, and Contra Costa. The Middle Ground Island Shoal site is located southeast of Ryer Island and west of Middle Ground Island within Suisun Bay (Figure 1). The Suisun Channel site extends from the western end of Chipps Island through the channel and down Broad Slough between Winter Island and Kimball Island (Figure 2).

Project Description:

Lind Marine (Permittee) will continue commercial hydraulic sand mining operations for the next 13 years in the Middle Ground Island Shoal and Suisun Channel. This operation provides local marine aggregate for use in highway maintenance and construction, new residential complexes, and commercial and public buildings within the greater San Francisco Bay Area. The use of local aggregate reduces traffic on freeways and the accompanying greenhouse gas emissions by eliminating the reliance on imported sand.

Middle Ground Island shoal is a 367-acre area west of Middle Ground Island in Suisun Bay that is mined under a lease with the Grossi family who owns the rights to the area. Suisun Channel is a 938-acre area that is mined under leases with the California State Lands Commission. The site extends from the western end of Chipps Island through the channel and down Broad Slough between Winter Island and Kimball Island. The Permittee is

Incidental Take Permit
No. 2081-2012-012-03

LIND MARINE.
COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

proposing to mine a combined 300,000 cubic yards (cy) annually for the next 13 years. Table 1 provides a breakdown of the proposed maximum annual volume per lease site.

Table 1: Annual Permitted Volumes between 2013 and 2026

Location/Lease No.	Permittee Annual Proposed Volume (cy)	Total Acreage
Suisun Channel PRC 7781.1: Suisun Bay/Western Delta (Suisun Associates)	150,000 ¹	938
Middle Ground Island Sand Shoals – Grossi Middle Ground (private lease)	150,000	367
TOTAL	300,000	1,305

¹ Suisun Associates volume shown is Lind Marine 's 50% share of the Suisun Associates joint venture. Source: CDFW Incidental Take Permit Application for Sand Mining by Lind Marine within Middle Ground Shoal and Suisun Bay.

Sand mining is performed by Permittee with one tugboat (either the *Trig Lind* or the *Petaluma*) and one hopper barge (the *J5200*) using the stationary potholing method of extraction. Stationary potholing involves the tugboat positioning the barge over an appropriate location. When that location depletes, the tugboat will reposition the barge. Extraction is halted while the barge is being repositioned. The J5200 hopper barge is 200 feet long by 45 feet wide.

The sand mining is achieved by means of a 14-inch diameter, 40-foot-long suction pipe that is lowered into the water using a cable winch system, and then into the sand substrate. There are water intake pipes located above the suction pipe that will be used to create sand slurry. Following a 3-5 minute priming period, the suction pipe creates a sand slurry mixture that is pumped through a 14-inch diameter pipe onto a flume equipped with loading gates that allow the barge to fill. The bulk of the water pumped onto the barge overflows through mesh screens above the water line of the barge and allowed to run back into the bay or channel as the sand settles out of the slurry mixture. The 5,000-gallon per minute suction pipe has a minimum operating depth of 15 feet and maximum depth of 40 feet. The barge has a maximum capacity of 1,850 cubic yards.

The volume of water to be diverted during sand mining is 16 acre-feet (af) in Suisun Bay, and 16 af in Middle Ground Island Sand Shoals for a total annual diverted volume of 32 af.

Permittee is proposing the use of a positive barrier fish screen that will be mounted on the small external suction vent pipes that pull water into the suction pipe to help create the sand-water slurry when the suction pipe is buried in the substrate. The fish screen design is based on a variety of factors that include guidance from the CDFW, National Marine Fisheries

Incidental Take Permit
No. 2081-2012-012-03

LIND MARINE.

COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

Service, and U.S. Fish and Wildlife Service to be effective in excluding juvenile and adult fish from entrainment during sand mining. The fish screen is designed to meet a flow rate of 3.8 cubic feet per second (cfs), approach velocity of 0.2 feet per second (fps), and slot velocity of 0.5 fps. When the suction pipes and fish screen are positioned above the surface, the screen will be visually inspected following each mining event for evidence of damage to the screen or its mounting. Mining would not occur if the integrity of the fish screen is damaged until repairs or a replacement is completed.

Depending on the mining and offloading locations, the entire operation, including loading, unloading and travel time, can take anywhere from 8 to 24 hours. A typical mining event will last around 10 hours which includes 3 to 6 hours of mining and 4 hours of travel, preparation, and offloading.

Once mining is completed, the barge is taken to a site for offloading. Offloading of material occurs at one of several storage sites throughout the Bay Area (Figure 3). The barge can utilize either dry offloading by conveyor belt or wet offloading using pumps and estuary water.

Because the volume of storage sites is limited, the Permittee is proposing year-round mining for the duration of the 13-year permit, and mining events will occur as a result of short-term demand for product.

Covered Species Subject to Take Authorization Provided by this Amended ITP:

This Amended ITP covers the following species:

Name	CESA Status
1. Central Valley Spring-run Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)	Threatened ⁴
2. Sacramento River Winter-run Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)	Endangered ⁵
3. Delta Smelt (<i>Hypomesus transpacificus</i>)	Endangered ⁶
4. Longfin Smelt (<i>Spirinchus thaleichthys</i>)	Threatened ⁷

These species and only these species are the “Covered Species” for the purposes of this Amended ITP.

⁴ See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(2)(C).

⁵ See *Id.*, subd. (a)(2)(M).

⁶ See *Id.*, subd. (a)(2)(O).

⁷ See *Id.*, subd. (b)(2)(E).

Impacts of the Taking on Covered Species:

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above expected to result in incidental take of individuals of the Covered Species include hydraulic sand mining and sand offloading (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality ("kill") may occur as a result of Covered Activities such as increased suspended sediments, contaminants, and toxicity within the overflow plume; reduction in dissolved oxygen levels as a result of suspended sediments; change in habitat quality; entrainment of larval fish in the suction pipes; and impingement of juvenile and adult fish on the suction pipes or fish screen. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursue, catch, capture, or attempt to do so of the Covered Species from loss of habitat and disruption of migration.

Winter-run and spring-run Chinook salmon eggs and larvae are not at risk of take in Suisun Bay where sand mining is to occur because the adult fish spawn and eggs incubate in tributary habitats upstream of the Delta. The larval salmon remain buried in gravel nests until the young salmon develop and emerge into the surface waters as fry, where they rear in upstream habitats for a period of time before migrating downstream.

Adult Delta smelt and longfin smelt migrate upstream to spawn primarily in the Sacramento River, Cache Slough, and the Sacramento Deep Water Ship Channel. The adhesive eggs of Delta smelt and longfin smelt are typically laid in shallow channel margin habitat and not in the deeper sub-tidal areas where sand mining occurs. Therefore, the eggs would not be at risk of take as a result of sand mining in Suisun Bay.

An impact of the Covered Activities would be a result of potential entrainment of larval fish during sand mining at the time periods that larval fish would be located within the Project area. The positive barrier fish screen to be mounted on the vent pipes would be sized to exclude juvenile and adult fish from entrainment during sand mining.

Impacts of the authorized taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: potential Covered Species mortality due to displacement from preferred habitat, entrainment of larval fish in the suction pipes as the fish screen is not sized to protect larval fish, impingement of juvenile and adult fish on the suction pipes or fish screen, benthic impacts from falling debris, and the potential for impacts from spills of pollutants (oils, gasoline, diesel, lubricants, etc.).

Incidental Take Permit
No. 2081-2012-012-03

LIND MARINE.

COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

Incidental Take Authorization of Covered Species:

This Amended ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, CDFW authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This Amended ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the Project Area, take of Covered Species resulting from violation of this Amended ITP, or intentional take of Covered Species.

Conditions of Approval:

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area, including areas used for vehicular ingress and egress, staging and parking, and noise and vibration generating activities that may cause take. CDFW's issuance of this Amended ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

- 1. Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this Amended ITP or adopted thereafter.
- 2. CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Environmental Impact Report (SCH No.: 2007072036) adopted by California State Lands Commission on October 19, 2012 as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).
- 3. ESA Compliance:** Permittee shall implement and adhere to the terms and conditions related to the some of the Covered Species in the nine U.S. Army Corps of Engineers permits for sand mining in the San Francisco Bay-Delta Estuary, California (Biological Opinion No. 151422SWR2005SR00625) and informal consultation on sand mining activities in the Sacramento-San Joaquin Estuary (U.S. Fish and Wildlife Service file no. 1-1-06-I-0255) for the Project pursuant to the federal Endangered Species Act (ESA). For purposes of this Amended ITP, where the terms and conditions for the Covered Species in the federal authorization are less protective of the Covered Species or otherwise conflict with this Amended ITP, the conditions of approval set forth in this Amended ITP shall control.
- 4. ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this Amended ITP within the time frames set forth below and as set forth in

Incidental Take Permit
No. 2081-2012-012-03

LIND MARINE.

COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

the amended Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this Amended ITP.

5. General Provisions:

- 5.1. Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this Amended ITP. The Designated Representative shall submit to CDFW in writing the name, qualifications, business address, and contact information of all representatives that will be present during Covered Activities. The Designated Representative and all representatives designated to work on the project (hereafter referred to as “representatives”), shall be knowledgeable and experienced with the operations of the Covered Activities and the provisions and take minimization measures of this permit. CDFW shall be notified in writing if a substitute Designated Representative is selected and if any staffing changes occur during the duration of this Amended ITP.
- 5.2. Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist has experience working in the Suisun Bay, and is knowledgeable and experienced in the biology, natural history, and collecting and handling of the Covered Species. The Designated Biologist shall be responsible for conducting the education program (refer to measure 5.4), and monthly monitoring of Covered Activities (refer to measure 6.3) to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species’ habitat. Permittee shall obtain CDFW approval of the Designated Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.
- 5.3. Boat Captain Authority. To ensure compliance with the Conditions of Approval of this Amended ITP, the Boat Captain shall have authority to immediately stop any activities, including sand mining, that are not in compliance with any permit condition in this Amended ITP.
- 5.4. Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this Amended ITP. Permittee shall provide interpretation for

non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.

- 5.5. Monitoring Notebook. The Boat Captain shall maintain a monitoring notebook on-site, as long as this permit remains active. The notebook shall include a copy of this Amended ITP with attachments, a list of signatures of all personnel who have successfully completed the education program, and documentation of each mining event which shall include the date and time, volume and type of sand mined, volumes of water diverted, and the lease site.
- 5.6. Hazardous Waste. Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.
- 5.7. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this Amended ITP. CDFW staff shall be provided with the necessary safety gear, if required.

6. Monitoring, Notification, and Reporting Provisions:

- 6.1. Notification Before Commencement. The Designated Representative shall notify CDFW at least 24 hours before starting Covered Activities for each season and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.
- 6.2. Notification of Non-Compliance. The Designated Representative shall immediately notify the CDFW Representative in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this Amended ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this Amended ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this Amended ITP to the CDFW Representative within 24 hours.
- 6.3. Compliance Monitoring. The Designated Biologist shall conduct monthly compliance inspections when Covered Activities occur. The Designated Biologist shall conduct

compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this Amended ITP; (4) and that Covered Activities are only occurring in the Project Area. The representative shall prepare written observation and inspection records summarizing: oversight activities, compliance inspections, and monitoring activities required by this Amended ITP.

- 6.4. Quarterly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 5.5 and 6.3 into a Quarterly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to CDFW's Regional Office at the office listed in the Notices section of this Amended ITP and via e-mail to CDFW's Regional Representatives. At the time of this Amended ITP's approval, the CDFW Bay Delta Regional Representative is Mia Bianchi (mia.bianchi@wildlife.ca.gov). CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.
- 6.5. Annual Status Report. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this Amended ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports for that year identified in Condition of Approval 6.4; (2) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (3) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (4) all available information about Project-related incidental take of the Covered Species; (5) an accounting of the acre-feet of water subject to disturbance and the mitigation acreage, both for the reporting calendar year, and a total since ITP issuance; and (6) information about other Project impacts on the Covered Species.
- 6.6. Final Mitigation Report. No later than 45 days after completion of all mitigation measures for the final year of the 10-year permit, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Representative shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and

ending dates of Covered Activities; (6) an assessment of the effectiveness of this Amended ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; (8) an accounting of the acre-feet of water subject to disturbance and the mitigation acreage for the 10-year permitted mining activities; and (9) any other pertinent information.

6.7. Notification of Take or Injury. Permittee shall immediately notify the Designated Representative if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Representative shall provide initial notification to CDFW by calling the Bay Delta Regional Office at (707) 428-2002. The CDFW Bay Delta Regional Representative, Mia Bianchi (mia.bianchi@wildlife.ca.gov), telephone number (707) 815-8722 shall also be contacted. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within five (5) calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.

6.8. CNDDDB Observations. The Designated Representative shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.

7. Take Minimization Measures:

The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Project Area during Covered Activities. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species:

7.1. Smelt Work Period Restriction. Sand mining volumes in the Middle Ground Shoal and Suisun Bay lease areas shall be restricted to a total of 108,000 cubic yards (cy) (54,000 cy for Middle Ground Shoal and 54,000 cy for Suisun Bay) from December 1 through June 30 of each year, with the exception of 2026 where the timeframe is restricted from December 1 through April 30. In addition, depth restrictions will also be applied from December 1 through June 30 such that no mining will occur in depths shallower than -25 ft MLLW.

7.2. Minimum Priming/Clearing Depth. Before the start of mining activities, the drag head

Incidental Take Permit
No. 2081-2012-012-03

LIND MARINE.

COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

shall be lowered to the bottom substrate, or a depth as close to the bottom as possible but not more than three feet off the bottom substrate before priming of the pump. The same depth restriction holds for clearing of the suction pipe.

- 7.3. Location and Sand Volume Limitation. Sand mining shall be restricted to those lease areas specified in Figure 1 and Figure 2. Mining location shall be actively tracked during mining events to ensure mining does not occur outside of a lease area.

The total annual sand volumes and individual lease volumes mined shall not exceed the values listed in Table 1 on page 2 of this Amended ITP. The Permittee shall keep a log of volumes mined per Condition 5.5. Sand mining shall cease each year once the annual sand volumes are reached in each lease area.

- 7.4. Water Volume Limitation. The total annual water diversion from sand mining shall be restricted to 32 af. The Permittee shall keep a log of water diversion per Condition 5.5. Sand mining shall cease each year once the total annual water diversion limit of 32 af is reached.

- 7.5. Water Depth Limitations. Sand mining shall be prohibited within 200 feet of any shoreline and within 250 feet of water with a depth of 9 feet or less (MLLW).

During the months of December through June, sand mining shall be restricted to areas deeper than 25 feet (MLLW). During the months of July through November, sand mining shall be restricted to areas deeper than 15 feet (MLLW).

- 7.6. Positive Barrier Fish Screen. Permittee shall install and operate a positive barrier fish screen on the water intake pipes of the suction pipe to protect aquatic species from entrainment. The screen shall be in place at all times during sand mining operations. The screen shall be in compliance with CDFW fish screen criteria, which can be found at www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp.

- 7.7. Positive Barrier Fish Screen Flow Velocity. Permittee shall perform a one-time measurement of the approach velocities to the fish screen to verify that the CDFW fish screen approach velocity of 0.2 fps is met.

- 7.8. Positive Barrier Fish Screen Inspection. Permittee shall visually inspect the fish screen following each mining event to verify screen integrity, remove any impinged debris and record any fish impinged on the screen. If screen is found to be damaged, sand mining shall cease until screen is either repaired or replaced.

- 7.9. Equipment Maintenance and Chemical Storage. All equipment operated within the bay or channels shall be checked and maintained daily to prevent leaks of materials that if introduced to the water could be deleterious to Covered Species. No equipment maintenance or fueling shall be done within or near any water body where petroleum

products or other pollutants from the equipment may enter these areas. Fuel and other material stored on the barge or tugboat shall be stored in a plastic tub to contain leaks or spills. Spill equipment such as booms, drip pans, and absorbent pads shall be on-board and be ready to deploy in case of a spill.

8. Habitat Management Land Acquisition and Restoration:

CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation for the duration of this permit.

To meet this requirement, the Permittee has purchased 0.107 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank, and for this Amended ITP, Permittee shall meet the mitigation acreage requirement through the purchase an additional 0.02 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank (refer to Condition of Approval 8.2 below). Permanent protection and funding for perpetual management of compensatory habitat required by this Amended ITP must be complete before starting Covered Activities, or within 18 months of the effective date of this Amended ITP if Security is provided pursuant to Condition of Approval 9 below for all uncompleted obligations.

8.1. Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands as follows:

The cost of Covered Species credits identified in Condition of Approval 8.2 below is estimated at \$250,000/acre for 0.02 acres: \$5,000.

Since the sand mining equipment will be fitted with a screen that meets the CDFW fish screening criteria and is protective of juvenile and adult fish species, no compensation for fish loss related to Covered Activities will be required during June through December of any year that the fish screens are in place and operating. Therefore, for the purposes of calculating mitigation, the volume of water diverted during the January through May period when Covered Species eggs and larval fish will be present is 18 af.

The formula used for calculating the acreage of impact to Covered Species from the Covered Activities (which includes entrainment risk) is based on the calculation used in the Operations Criteria and Plan (OCAP) Biological Opinion and the CDFW Consistency Determination for the exports of the State Water Project (SWP). The calculation was developed for the aquatic effect to Delta smelt and uses a ratio of

Incidental Take Permit
No. 2081-2012-012-03

LIND MARINE.

COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

water volume diverted (SWP assumes 3.0 million af) and the corresponding habitat obligation of 8,000 acres (0.00267 acres of habitat per af of water diverted). The five California water year classifications established by the Department of Water Resources (DWR) to reflect Central Valley hydrologic conditions each year (wet, above normal, below normal, dry, and critically dry) were used to represent general trends in X2 location during the later winter and spring months each year. The frequency of occurrence of each water year type was assumed to be 20 percent. A weighting factor was used to represent variation in the potential risk of larval smelt entrainment during sand mining with the greatest weighting (5) being given to years when hydrologic conditions were wet and X2 located further downstream near Middle Ground Shoal and Suisun Bay where the risk of larval smelt entrainment is higher. The lowest weighting factor (1) was given to below normal, dry, and critically dry water years when X2 is located further upstream and sand mining would occur downstream in areas that have elevated salinity where the density of larval smelt (and risk of entrainment) would be reduced. Results of the mitigation estimates based on the water-year type framework for sand mining in Middle Ground Shoal and Suisun Bay by Permittee are summarized in the table below. The total mitigation obligation for Permittee increases by 0.02 acres in this Amended ITP. Additionally, the time period for water entrainment is extended until April 30, 2026.

<i>Impacts in Middle Ground Shoal and Suisun Bay</i>					
Water Year Type	Volume AF	Mitigation Ratio/AF	Weighting Factor	Frequency Occurrence	Mitigation Acres
<i>Wet</i>	<i>18</i>	<i>0.0026667</i>	<i>5</i>	<i>0.2</i>	<i>0.048</i>
<i>Above Normal</i>	<i>18</i>	<i>0.0026667</i>	<i>2</i>	<i>0.2</i>	<i>0.029</i>
<i>Below Normal</i>	<i>18</i>	<i>0.0026667</i>	<i>1</i>	<i>0.2</i>	<i>0.019</i>
<i>Dry</i>	<i>18</i>	<i>0.0026667</i>	<i>1</i>	<i>0.2</i>	<i>0.010</i>
<i>Critical</i>	<i>18</i>	<i>0.0026667</i>	<i>1</i>	<i>0.2</i>	<i>0.010</i>
				<i>Total</i>	<i>0.127</i>

8.2. Covered Species Credits. Permittee shall purchase **0.02** acres of Covered Species credits from a CDFW-approved mitigation or conservation bank covering smelt and salmonid habitat prior to initiating Covered Activities, or no later than 18 months from the issuance of this Amended ITP if Security is provided pursuant to Condition of Approval 9 below.

9. Performance Security

The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 8.1 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:

- 9.1. Security Amount. The Security for this Amended ITP shall be in the amount of \$5,000. This amount is based on the cost estimates identified in Condition of Approval 8.1.1 above.
- 9.2. Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 2) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.
- 9.3. Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this Amended ITP, whichever occurs first.
- 9.4. Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.
- 9.5. Security Transmittal. If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 3) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.
- 9.6. Security Drawing. The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this Amended ITP.
- 9.7. Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:
 - Written documentation of the purchase of Covered Species credits; and
 - Timely submission of all required reports.

Even if Security is provided, the Permittee must complete the required purchase of Covered Species credits no later than 18 months from the effective date of this Amended ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.

Amendment:

This Amended ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

Stop-Work Order:

CDFW may issue Permittee a written stop-work order requiring Permittee to suspend any Covered Activity for an initial period of up to 25 days to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species. Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 25 additional days. Suspension and revocation of this Amended ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

Compliance with Other Laws:

This Amended ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This Amended ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable federal, state, and local law.

Notices:

Written notices, reports and other communications relating to this Amended ITP shall be delivered to CDFW by registered first class mail at the following address, or at addresses CDFW may subsequently provide to the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2012-012-03) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Erin Chappell, Regional Manager
California Department of Fish and Wildlife
Bay Delta Region
2825 Cordelia Road, Suite 100

Incidental Take Permit
No. 2081-2012-012-03

LIND MARINE.

COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

Fairfield, CA 94534
Telephone (707) 428-2002

And a copy to:

Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
Post Office Box 944209
Sacramento, CA 94244-2090
CESA@wildlife.ca.gov

Unless Permittee is notified otherwise, CDFW's Regional Representatives for purposes of addressing issues that arise during implementation of this ITP are:

Mia Bianchi
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
Telephone (707) 815-8722
Mia.Bianchi@wildlife.ca.gov

Compliance with CEQA:

CDFW's issuance of this Amended ITP is subject to CEQA. CDFW is a responsible agency pursuant to CEQA with respect to this Amended ITP because of prior environmental review of the Project by the lead agency, California State Lands Commission. (See generally Pub. Resources Code, §§21067, 21069). The lead agency's prior environmental review of the Project is set forth in the San Francisco Bay and Delta Sand Mining Project Environmental Impact Report (EIR), (State Clearinghouse No. 2007072036) dated September 2012 that the California State Lands Commission adopted for the San Francisco Bay and Delta Sand Mining Project on October 19, 2012. At the time the lead agency adopted/certified the EIR and approved the Project, it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

This Amended ITP, along with CDFW's related CEQA findings, which are available as a separate document, provide evidence of CDFW's consideration of the lead agency's EIR for the Project and the environmental effects related to issuance of this Amended ITP [CEQA Guidelines, § 15096, subd.(f)]. CDFW finds that issuance of this Amended ITP will not result in any previously undisclosed potentially significant effects on the environment or a substantial increase in the severity of any potentially significant environmental effects previously disclosed by the lead agency. Furthermore, to the extent the potential for such effects exists, CDFW finds adherence to and implementation of the Conditions of Project Approval adopted by the lead agency, and that adherence to and implementation of the Conditions of Approval imposed by CDFW through the issuance of this Amended ITP, will

Incidental Take Permit
No. 2081-2012-012-03

LIND MARINE.

COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

avoid or reduce to below a level of significance any such potential effects. CDFW consequently finds that issuance of this Amended ITP will not result in any significant, adverse impacts on the environment.

Findings Pursuant to CESA:

These findings are intended to document CDFW's compliance with the specific findings requirements set forth in CESA and related regulations. [Fish and Game Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2)].

CDFW finds based on substantial evidence in the ITP application, San Francisco Bay and Delta Sand Mining Project EIR, the results of consultations, and the administrative record of proceedings, that issuance of this Amended ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this Amended ITP will be incidental to the otherwise lawful activities covered under this Amended ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this Amended ITP and as described in the Amended MMRP. Measures include: (1) permanent habitat protection; (2) worker education; (3) establishment of shoreline and shallow water avoidance zones; (4) the installation of a positive fish screen barrier on the suction vent pipes; and (5) Quarterly, Annual, and Final Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the protection and management in perpetuity of 0.02 acres of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this Amended ITP minimizes and fully mitigates the impacts of the taking caused by the Project;
- (3) The take avoidance and mitigation measures required pursuant to the conditions of this Amended ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this Amended ITP;
- (4) The measures required by this Amended ITP maintain Permittee's objectives to the greatest extent possible;
- (5) All required measures are capable of successful implementation;
- (6) This Amended ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;

- (7) Permittee has ensured adequate funding to implement the measures required by this Amended ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and
- (8) Issuance of this Amended ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this Amended ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

Attachments:

FIGURE 1	Map of Middle Ground Island Shoal Site
FIGURE 2	Map of Suisun Channel Site
FIGURE 3	Map of Sand Offload Sites
ATTACHMENT 1	Amended Mitigation Monitoring and Reporting Program
ATTACHMENT 2	Letter of Credit Form
ATTACHMENT 3	Mitigation Payment Transmittal Form
ATTACHMENT 4	Second Amendment Track Changes

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 11/24/2025.

DocuSigned by:
Erin Chappell
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Erin Chappell
Regional Manager
Bay Delta Region

Incidental Take Permit
No. 2081-2012-012-03
LIND MARINE.
COMMERCIAL SAND MINING BY LIND MARINE WITHIN MIDDLE GROUND SHOAL AND SUISUN BAY
AMENDMENT 2

Attachment 1

AMENDMENT NO. 2 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE MITIGATION MONITORING AND REPORTING PROGRAM (MMRP) CALIFORNIA ENDANGERED SPECIES ACT

INCIDENTAL TAKE PERMIT NO. 2081-2012-012-03

PERMITTEE: Lind Marine (formerly San Jerico, Inc.)

PROJECT: Commercial Sand Mining by Lind Marine Within
Middle Ground Shoal and Suisun Bay

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure that the impact minimization and mitigation measures required by the California Department of Fish and Wildlife (CDFW) for the above-referenced Project are properly implemented, and thereby to ensure compliance with section 2081(b) of the Fish and Game Code and section 21081.6 of the Public Resources Code. A table summarizing the mitigation measures required by CDFW is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures, but the descriptions in the table do not supersede the mitigation measures set forth in the California Incidental Take Permit (ITP) and in attachments to the ITP, and the omission of a permit requirement from the attached table does not relieve the Permittee of the obligation to ensure the requirement is performed.

OBLIGATIONS OF PERMITTEE

Mitigation measures must be implemented within the time periods indicated in the table that appears below. Permittee has the primary responsibility for monitoring compliance with all mitigation measures and for reporting to CDFW on the progress in implementing those measures. These monitoring and reporting requirements are set forth in the ITP itself and are summarized at the front of the attached table.

VERIFICATION OF COMPLIANCE, EFFECTIVENESS

CDFW may, at its sole discretion, verify compliance with any mitigation measure or independently assess the effectiveness of any mitigation measure.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure, Source, Implementation Schedule, Responsible Party, and Status/Date/Initials. The Mitigation Measure column summarizes the mitigation requirements of the ITP. The Source column identifies the ITP condition that sets forth the mitigation measure. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure. The Status/Date/Initials column shall be completed by the Permittee during preparation of each Status Report and the Final Mitigation Report, and must identify the implementation status of each mitigation measure, the date that status was determined, and the initials of the person determining the status.

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE COMMENCING SAND MINING OPERATIONS					
1	<u>Designated Representative</u> . Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this Amended ITP. The Designated Representative shall submit to CDFW in writing the name, qualifications, business address, and contact information of all representatives that will be present during Covered Activities. The Designated Representative and all representatives designated to work on the project (hereafter referred to as "representatives"), shall be knowledgeable and experienced with the operations of the Covered Activities and the provisions and take minimization measures of this permit. CDFW shall be notified in writing if a substitute Designated Representative is selected and if any staffing changes occur during the duration of this Amended ITP.	ITP Condition # 5.1	Before commencing sand mining activities/ Entire Project	Permittee	
2	<u>Designated Biologist</u> . Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist has experience working in the Suisun Bay, and is knowledgeable and experienced in the biology, natural history, and collecting and handling of the Covered Species. The Designated Biologist shall be responsible for conducting the education program (refer to measure 5.4), and monthly monitoring of Covered Activities (refer to measure 6.3) to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.	ITP Condition # 5.2	Before commencing sand mining activities/ Entire Project	Permittee	
3	<u>Education Program</u> . Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this Amended ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.	ITP Condition # 5.4	Before commencing sand mining activities/ Entire Project	Permittee	
4	<u>Notification Before Commencement</u> . The Designated Representative shall notify CDFW at least 24 hours before starting Covered Activities for each season and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.	ITP Condition # 6.1	Before commencing sand mining activities/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
5	<u>Positive Barrier Fish Screen</u> . Permittee shall install and operate a positive barrier fish screen on the water intake pipes of the suction pipe to protect aquatic species from entrainment. The screen shall be in place at all times during sand mining operations. The screen shall be in compliance with CDFW fish screen criteria, which can be found at www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp .	ITP Condition # 7.6	Before commencing sand mining activities/ Entire Project	Permittee	
6	<u>Positive Barrier Fish Screen Flow Velocity</u> . Permittee shall perform a one-time measurement of the approach velocities to the fish screen to verify that the CDFW fish screen approach velocity of 0.2 fps is met.	ITP Condition # 7.7	Before commencing sand mining activities/ Entire Project	Permittee	
7	<p><u>Covered Species Credits</u>. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands as follows: The cost of Covered Species credits identified in Condition of Approval 8.2 is estimated at \$2450,000/acre for 0.02 0.107-acres: \$5,00016,050.00. Since the sand mining equipment will be fitted with a screen that meets the CDFW fish screening criteria and is protective of juvenile and adult fish species, no compensation for fish loss loss related to Covered Activities will be required during June through December of any year that the fish screens are in place and operating. Therefore, for the purposes of calculating mitigation, the volume of water diverted during the January through May period when Covered Species eggs and larval fish will be present is 18 af. The formula used for calculating the acreage of impact to Covered Species from the Covered Activities (which includes entrainment risk) is based on the calculation used in the Operations Criteria and Plan (OCAP) Biological Opinion and the CDFW Consistency Determination for the exports of the State Water Project (SWP). The calculation was developed for the aquatic effect to Delta smelt and uses a ratio of water volume diverted (SWP assumes 3.0 million af) and the corresponding habitat obligation of 8,000 acres (0.00267 acres of habitat per af of water diverted). The five California water year classifications established by the Department of Water Resources (DWR) to reflect Central Valley hydrologic conditions each year (wet, above normal, below normal, dry, and critically dry) were used to represent general trends in X2 location during the later winter and spring months each year. The frequency of occurrence of each water year type was assumed to be 20 percent. A weighting factor was used to represent variation in the potential risk of larval smelt entrainment during sand mining with the greatest weighting (5) being given to years when hydrologic conditions were wet and X2 located further downstream near Middle Ground Shoal and Suisun Bay where the risk of larval smelt entrainment is higher. The lowest weighting factor (1) was given to below normal, dry, and critically dry water years when X2 is located further upstream and sand mining would occur downstream in areas that have elevated salinity where the density of larval smelt (and risk of entrainment) would be reduced. Results of the mitigation estimates based on the water-year type framework for sand mining in Middle Ground Shoal and Suisun Bay by Permittee are summarized in the table below. The total mitigation obligation for Permittee increases by 0.02 acres in this Amended ITP from 0.048 acres in the existing ITP to 0.107 acres over the term of the ITP, an increase of 0.059 acres.</p> <p>Permittee shall purchase 0.02107 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank covering smelt and salmonid habitat prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Conditions of Approval 9.1 through 9.7.</p>	ITP Condition # 8.1, # 8.2	Before commencing sand mining activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
8	<p><u>Security Amount.</u> The Security shall be in the amount of \$5,00016,050.00. This amount is based on the cost estimates identified in Condition of Approval 8.1 above.</p> <p><u>Security Form.</u> The Security shall be in the form of an irrevocable letter of credit (see Attachment 2) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.</p> <p><u>Security Timeline.</u> The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this Amended ITP, whichever occurs first.</p> <p><u>Security Holder.</u> The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.</p> <p><u>Security Transmittal.</u> If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 3) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.</p>	ITP Condition # 9.1, 9.2, 9.3, 9.4, 9.5	Security shall be provided to CDFW before commencing sand mining activities, or within 30 days after the effective date of this ITP, whichever occurs first	Permittee	
9	<p><u>Security Drawing.</u> The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this Amended ITP.</p>	ITP Condition # 9.6	Entire Project	CDFW	
10	<p><u>Security Release.</u> The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:</p> <ul style="list-style-type: none"> • Written documentation of the acquisition of the HM lands; and • Timely submission of all required reports. <p>Even if Security is provided, the Permittee must complete the required purchase of Covered Species credits no later than 18 months from the effective date of this Amended ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.</p>	ITP Condition # 9.7	Entire Project	CDFW	
DURING SAND MINING OPERATIONS					
11	<p><u>Boat Captain Authority.</u> To ensure compliance with the Conditions of Approval of this Amended ITP, the Boat Captain shall have authority to immediately stop any activities, including sand mining, that are not in compliance with any permit condition in this Amended ITP.</p>	ITP Condition # 5.3	Entire Project	Permittee	
12	<p><u>Monitoring Notebook.</u> The Boat Captain shall maintain a monitoring notebook on-site, as long as this permit remains active. The notebook shall include a copy of this Amended ITP with attachments, a list of signatures of all personnel who have successfully completed the education program, and documentation of each mining event which shall include the date and time, volume and type of sand mined, volumes of water diverted, and the lease site.</p>	ITP Condition # 5.5	Entire Project	Permittee	
13	<p><u>Hazardous Waste.</u> Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.</p>	ITP Condition # 5.6	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
14	<u>CDFW Access.</u> Permittee shall provide CDFW staff with reasonable access to the Project, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this Amended ITP. CDFW staff shall be provided with the necessary safety gear, if required.	ITP Condition # 5.7	Entire Project	Permittee	
15	<u>Notification of Non-Compliance.</u> The Designated Representative shall immediately notify the CDFW Representative in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this Amended ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this Amended ITP and/or this MMRP. The Designated Representative shall report any non-compliance with this Amended ITP to the CDFW Representative within 24 hours.	ITP Condition # 6.2	Entire Project	Permittee	
16	<u>Compliance Monitoring.</u> The Designated Biologist shall conduct monthly compliance inspections when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this Amended ITP; (4) and that Covered Activities are only occurring in the Project Area. The representative shall prepare written observation and inspection records summarizing: oversight activities, compliance inspections, and monitoring activities required by this Amended ITP.	ITP Condition # 6.3	Monthly for the duration of the project	Permittee	
17	<u>Quarterly Compliance Report.</u> The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 5.5 and 6.3 into a Quarterly Compliance Report and submit it to CDFW along with a copy of this MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to CDFW's Regional Office at the office listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representatives. At the time of this ITP's approval, the CDFW Bay Delta Regional Representative is Mia Bianchi (mia.bianchi@wildlife.ca.gov) Ms. Crystal Spurr (crystal.spurr@wildlife.ca.gov) . CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.	ITP Condition # 6.4	Quarterly for the duration of the project	Permittee	
18	<u>Annual Status Report.</u> Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this Amended ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports for that year identified in Condition of Approval 6.4; (2) a copy of the table in this MMRP with notes showing the current implementation status of each mitigation measure; (3) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (4) all available information about Project-related incidental take of the Covered Species; (5) an accounting of the acre-feet of water subject to disturbance and the mitigation acreage, both for the reporting calendar year, and a total since ITP issuance; and (6) information about other Project impacts on the Covered Species.	ITP Condition # 6.5	Annually, due no later than January 31 each year, for the duration of the project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
19	<u>Notification of Take or Injury.</u> Permittee shall immediately notify the Designated Representative if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Representative shall provide initial notification to CDFW by calling the Bay Delta Regional Office at (707) 428-2002 (707) 944-5500 . The CDFW Bay Delta Regional Representative, Mia Bianchi (mia.bianchi@wildlife.ca.gov) Ms. Crystal Spurr (crystal.spurr@wildlife.ca.gov), telephone number (209) 234-3442 (707) 815-8722 shall also be contacted. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and this ITP Number. Following initial notification, Permittee shall send CDFW a written report within five (5) calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.	ITP Condition # 6.7	Entire Project	Permittee	
20	<u>CNDDDB Observations.</u> The Designated Representative shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.	ITP Condition # 6.8	Entire Project	Permittee	
21	<u>Smelt Work Period Restriction.</u> Sand mining volumes in the Middle Ground Shoal and Suisun Bay lease areas shall be restricted to a total of 108,000 cubic yards (cy) (54,000 cy for Middle Ground Shoal and 54,000 cy for Suisun Bay) from December 1 through June 30 of each year with the exception of 2026 where the timeframe is restricted from December 1 through April 30. In addition, depth restrictions will also be applied from December 1 through June 30 such that no mining will occur in depths shallower than -25 ft. MLLW.	ITP Condition # 7.1	Entire Project	Permittee/CDFW	
22	<u>Minimum Priming/Clearing Depth.</u> Before the start of mining activities, the drag head shall be lowered to the bottom substrate, or a depth as close to the bottom as possible but not more than three feet off the bottom substrate before priming of the pump. The same depth restriction holds for clearing of the suction pipe.	ITP Condition # 7.2	Entire Project	Permittee	
23	<u>Location and Sand Volume Limitation.</u> Sand mining shall be restricted to those lease areas specified in Figure 1 and Figure 2. Mining location shall be actively tracked during mining events to ensure mining does not occur outside of a lease area. The total annual sand volumes and individual lease volumes mined shall not exceed the values listed in Table 1 on page 2 of this Amended ITP. The Permittee shall keep a log of volumes mined per Condition 5.5. Sand mining shall cease each year once the annual sand volumes are reached in each lease area.	ITP Condition # 7.3	Entire Project	Permittee	
24	<u>Water Volume Limitation.</u> The total annual water diversion from sand mining shall be restricted to 32 acre-feet. The Permittee shall keep a log of water diversion per Condition 5.5. Sand mining shall cease each year once the total annual water diversion limit of 32 acre-feet is reached.	ITP Condition # 7.4	Entire Project	Permittee	
25	<u>Water Depth Limitations.</u> Sand mining shall be prohibited within 200 feet of any shoreline and within 250 feet of water with a depth of 9 feet or less (MLLW). During the months of December through June, sand mining shall be restricted to areas deeper than 25 feet (MLLW). During the months of July through November, sand mining shall be restricted to areas deeper than 15 feet (MLLW).	ITP Condition # 7.5	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
26	<u>Positive Barrier Fish Screen Inspection.</u> Permittee shall visually inspect the fish screen following each mining event to verify screen integrity, remove any impinged debris and record any fish impinged on the screen. If screen is found to be damaged, sand mining shall cease until screen is either repaired or replaced.	ITP Condition # 7.8	Entire Project	Permittee	
27	<u>Equipment Maintenance and Chemical Storage.</u> All equipment operated within the bay or channels shall be checked and maintained daily to prevent leaks of materials that if introduced to the water could be deleterious to Covered Species. No equipment maintenance or fueling shall be done within or near any water body where petroleum products or other pollutants from the equipment may enter these areas. Fuel and other material stored on the barge or tugboat shall be stored in a plastic tub to contain leaks or spills. Spill equipment such as booms, drip pans, and absorbent pads shall be on-board and be ready to deploy in case of a spill.	ITP Condition # 7.9	Entire Project	Permittee	
POST-SAND MINING OPERATIONS					
28	<u>Final Mitigation Report.</u> No later than 45 days after completion of all mitigation measures for the final year of the 10-year permit, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Representative shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports and all ASRs; (2) a copy of the table in this MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; (8) an accounting of the acre-feet of water subject to disturbance and the mitigation acreage for the 10 year permitted mining activities; and (9) any other pertinent information.	ITP Condition # 6.6	Within 45 days after completion of all mitigation measures for the final year of the 10-year permit	Permittee	

Attachment 4

Amended Incidental Take Permit 2081-2012-012-03 (Amendment No. 2)

1. The ITP Authority section has been amended as follows:

Authority: This California Endangered Species Act (CESA) Incidental Take Permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take¹ of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.² CDFW may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, § 783.4).

Permittee: Lind Marine Jerico Products, Inc.

Principal Officer: William H. Butler, Vice President

Contact Person: William H. Butler, Vice President

Mailing Address: 1175 Nimitz Ave, Suite 120
Vallejo, CA 94592~~100 East D Street~~
~~Petaluma, CA 94952~~

2. The ITP Background section has been inserted preceding the Effective Date and Expiration section as follows:

Amended ITP³ Background

On July 14, 2013, San Jericho Product, Inc. submitted a CESA ITP application to CDFW pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. Jericho Products, Inc. sought take coverage authorization for CESA listed species associated with project-related impacts from the Commercial Sand Mining by Jerico Products, Inc. Within the Middle Ground Shoal and Suisun Bay in Solano County, California (Project).

¹ Pursuant to Fish and Game Code section 86, "Take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 (for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "take" ... means to catch, capture or kill").

² The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game Code sections 2062, 2067, and 2068, respectively.

³ When this incidental take permit and attachments refer to the "ITP", it means the "Amended ITP" unless the context dictates otherwise.

On April 1, 2014, CDFW issued ITP No. 2081-2012-012-03 to San Jericho Products, Inc. (Permittee) authorizing take of Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*), Delta smelt (*Hypomesus transpacificus*), longfin smelt (*Spirinchus thaleichthys*) (collectively, the Covered Species) associated with and incidental to the Jerico Products, Inc. Within the Middle Ground Shoal and Suisun Bay Project. The Project as described in the ITP originally issued by CDFW includes continue commercial hydraulic sand mining operations for 10 years in the Middle Ground Island Shoal and Suisun Channel. In issuing the ITP, CDFW found, among other things, that Permittee's compliance with the Conditions of Approval of the ITP would fully mitigate impacts to the Covered Species and would not jeopardize the continued existence of the Covered Species.

On July 18, 2014, San Jericho Products, Inc. submitted a request for a "major amendment" to CESA ITP No. 2081-2012-012-03 (See Cal. Code Regs., § 783.6(c)(5)). Since the issuance of the ITP, the Permittee requests amending the language to Condition 7.1 to allow sand mining upstream of the X2 location from December 1 through June 30, and instead restrict and reduce the mining activity and sand mining volumes in Middle Ground Shoal and Suisun Bay in order to avoid and minimize potential losses of larval smelt. The Permittee also requests a change to ITP Condition 8.2 to increase compensatory habitat mitigation to cover any incidental take of larval smelt that cannot be avoided through the ITP minimization and avoidance measures. Major Amendment No. 1 (Amendment) increased the overall allowable take authorization and makes the following changes to the existing ITP. This Amendment made changes to the smelt work period restrictions (Condition 7.1), limiting the sand mining volume and depth during December 1 through June 30 of each year in the Middle Ground Shoal and Suisun Bay areas. Second, this Amendment added to the compensatory habitat mitigation (Section 8 of the ITP) an additional 0.059 acres of Covered species credits in order to mitigate for potential entrainment and mortality of larval Delta smelt and longfin smelt due to mining activities upstream of the X2 location. Third, this Amendment made additional changes to ITP Section 8 (Habitat Management Land Acquisition and Restoration), including changes to Conditions 8.1 and 8.2, Condition 9.1, and the MMRP, as a result of the first two changes.

On December 29, 2023 (and fees submitted October 2, 2024), Lind Marine (formerly known as Jerico Products, Inc.) submitted a request for a "major amendment" to CESA ITP No. 2081-2012-012-03 (See Cal. Code Regs., § 783.6(c)(5)). The Permittee requests to extend the expiration date of the ITP from December 30, 2023 until April 30, 2026 to be able to continue to conduct mining operations until then. Amendment 2 extends the ITP expiration date until April 30, 2026. CDFW has increased compensatory habitat mitigation requirement by an additional 0.02 acres to cover any incidental take of larval smelt that cannot be avoided through the ITP minimization and avoidance measures.

CDFW now reissues this ITP including the revised provisions in this second major amendment (Collectively, Amended ITP). The Amended ITP includes all of the operative provisions as of the effective date of this Amended ITP. Attachment 4 to this

Amended ITP shows the specific red-line changes made to the existing ITP as a result of this major amendment.

3. The Effective Date and Expiration Date section has been amended as follows:

This original ITP ~~was~~shall be executed in duplicate original form and ~~shall~~ become effective ~~when~~once a duplicate original ~~was~~is acknowledged by signature of the Permittee on the last page of the ~~is original~~ ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. The original ITP's effective date was April 1, 2014 and the expiration date was December 31, 2023. This section amendment to the ITP extends the expiration date until April 30, 2026. This Amended ITP shall become effective when a duplicate original is acknowledged by signature of the Permittee on the last page of this ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. This Amended ITP is effective as of the date signed by CDFW below. Unless renewed by CDFW, this ITP's authorization to take the Covered Species shall expire on April 30, 2026~~December 31, 2023~~.

Notwithstanding the expiration date on the take authorization provided by this Amended ITP, Permittee's obligations pursuant to this Amended ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 6.6 of this Amended ITP.

4. The Location section has been amended as follows:

The Commercial Sand Mining by Lind Marine San Jerico Products, Inc. ~~w~~Within the Middle Ground Shoal and Suisun Bay (Project) has sites located in the Middle Ground Island Shoal and Suisun Channel of Suisun Bay within the counties of Solano, Sacramento, and Contra Costa. The Middle Ground Island Shoal site is located southeast of Ryer Island and west of Middle Ground Island within Suisun Bay (Figure 1). The Suisun Channel site extends from the western end of Chipps Island through the channel and down Broad Slough between Winter Island and Kimball Island (Figure 2).

5. The Project Description section in its entirety has been amended as follows:

Lind Marine Jerico Products, Inc. (Permittee) ~~will proposes to~~ continue commercial hydraulic sand mining operations for the next ~~130~~ years in the Middle Ground Island Shoal and Suisun Channel. This operation provides local marine aggregate for use in highway maintenance and construction, new residential complexes, and commercial and public buildings within the greater San Francisco Bay Area. The use of local aggregate reduces traffic on freeways and the accompanying greenhouse gas emissions by eliminating the reliance on imported sand.

Middle Ground Island shoal is a 367-acre area west of Middle Ground Island in Suisun Bay that is mined under a lease with the Grossi family who owns the rights to the area. Suisun Channel is a 938-acre area that is mined under leases with the California State

Lands Commission. The site extends from the western end of Chipps Island through the channel and down Broad Slough between Winter Island and Kimball Island. The Permittee is proposing to mine a combined 300,000 cubic yards (cy) annually for the next 130 years. Table 1 provides a breakdown of the proposed maximum annual volume per lease site.

Table 1: [Proposed](#) Annual Permitted Volumes between 2013 and 20262

Location/Lease No.	Permittee Annual Proposed Volume (cy)	Total Acreage
Suisun Channel PRC 7781.1: Suisun Bay/Western Delta (Suisun Associates)	150,000 ¹	938
Middle Ground Island Sand Shoals – Grossi Middle Ground (private lease)	150,000	367
TOTAL	300,000	1,305

¹ Suisun Associates volume shown is [Lind Marine's Jerico's](#) 50% share of the Suisun Associates joint venture.

Source: CDFW Incidental Take Permit Application for Sand Mining by [Lind MarineJerico Products](#), Inc. within Middle Ground Shoal and Suisun Bay.

Sand mining is performed by Permittee with one tugboat (either the *Trig Lind* or the *Petaluma*) and one hopper barge (the *J5200*) using the stationary potholing method of extraction. Stationary potholing involves the tugboat positioning the barge over an appropriate location. When that location depletes, the tugboat will reposition the barge. Extraction is halted while the barge is being repositioned. The J5200 hopper barge is 200 feet long by 45 feet wide.

The sand mining is achieved by means of a 14-inch diameter, 40-foot-long suction pipe that is lowered into the water using a cable winch system, and then into the sand substrate. There are water intake pipes located above the suction pipe that will be used to create sand slurry. Following a 3-5 minute priming period, the suction pipe creates a sand slurry mixture that is pumped through a 14-inch diameter pipe onto a flume equipped with loading gates that allow the barge to fill. The bulk of the water pumped onto the barge overflows through mesh screens above the water line of the barge and allowed to run back into the bay or channel as the sand settles out of the slurry mixture. The 5,000-gallon per minute suction pipe has a minimum operating depth of 15 feet and maximum depth of 40 feet. The barge has a maximum capacity of 1,850 cubic yards.

The volume of water to be diverted during sand mining is 16-acre feet (af) in Suisun Bay, and 16 af in Middle Ground Island Sand Shoals for a total annual diverted volume of 32 af.

Permittee is proposing the use of a positive barrier fish screen that will be mounted on the small external suction vent pipes that pull water into the suction pipe to help create

the sand-water slurry when the suction pipe is buried in the substrate. The fish screen design is based on a variety of factors that include guidance from the CDFW, National Marine Fisheries Service, and U.S. Fish and Wildlife Service to be effective in excluding juvenile and adult fish from entrainment during sand mining. The fish screen is designed to meet a flow rate of 3.8 cubic feet per second (cfs), approach velocity of 0.2 feet per second (fps), and slot velocity of 0.5 fps. When the suction pipes and fish screen are positioned above the surface, the screen will be visually inspected following each mining event for evidence of damage to the screen or its mounting. Mining would not occur if the integrity of the fish screen is damaged until repairs or a replacement is completed.

Depending on the mining and offloading locations, the entire operation, including loading, unloading and travel time, can take anywhere from 8 to 24 hours. A typical mining event will last around 10 hours which includes 3 to 6 hours of mining and 4 hours of travel, preparation, and offloading.

Once mining is completed, the barge is taken to a site for offloading. Offloading of material occurs at one of several storage sites throughout the Bay Area (Figure 3). The barge can utilize either dry offloading by conveyor belt or wet offloading using pumps and estuary water.

Because the volume of storage sites is limited, the Permittee is proposing year-round mining for the duration of the 130-year permit, and mining events will occur as a result of short-term demand for product.

Covered Species Subject to Take Authorization Provided by this [Amended](#) ITP:

This [Amended](#) ITP covers the following species:

Name	CESA Status
1. Central Valley Spring-run Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)	Threatened ⁴
2. Sacramento River Winter-run Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)	Endangered ⁵
3. Delta Smelt (<i>Hypomesus transpacificus</i>)	Endangered ⁶
4. Longfin Smelt (<i>Spirinchus thaleichthys</i>)	Threatened ⁷

These species and only these species are the “Covered Species” for the purposes of this [Amended](#) ITP.

⁴ See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(2)(C).

⁵ See *Id.*, subd. (a)(2)(M).

⁶ See *Id.*, subd. (a)(2)(O).

⁷ See *Id.*, subd. (b)(2)(E).

6. Incidental Take Authorization of Covered Species Section has been amended as follows:

This [Amended](#) ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, CDFW authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This [Amended](#) ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the Project Area, take of Covered Species resulting from violation of this [Amended](#) ITP, or intentional take of Covered Species.

7. The Conditions of Approval Section has been amended as follows:

Conditions of Approval:

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area, including areas used for vehicular ingress and egress, staging and parking, and noise and vibration generating activities that may cause take. CDFW's issuance of this [Amended](#) ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

- 1. Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this [Amended](#) ITP or adopted thereafter.
- 2. CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Environmental Impact Report (SCH No.: 2007072036) adopted by California State Lands Commission on October 19, 2012 as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).
- 3. ESA Compliance:** Permittee shall implement and adhere to the terms and conditions related to the some of the Covered Species in the nine U.S. Army Corps of Engineers permits for sand mining in the San Francisco Bay-Delta Estuary, California (Biological Opinion No. 151422SWR2005SR00625) and informal consultation on sand mining activities in the Sacramento-San Joaquin Estuary (U.S. Fish and Wildlife Service file no. 1-1-06-I-0255) for the Project pursuant to the federal Endangered Species Act (ESA). For purposes of this [Amended](#) ITP, where the terms and conditions for the Covered Species in the federal authorization are less protective of the Covered Species or otherwise conflict with this [Amended](#) ITP, the conditions of approval set forth in this [Amended](#) ITP shall control.

4. **ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this [Amended](#) ITP within the time frames set forth below and as set forth in the [amended](#) Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this [Amended](#) ITP.

8. **General Provisions have been amended as follows:**

- 5.1 Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this [Amended](#) ITP. The Designated Representative shall submit to CDFW in writing the name, qualifications, business address, and contact information of all representatives that will be present during Covered Activities. The Designated Representative and all representatives designated to work on the project (hereafter referred to as “representatives”), shall be knowledgeable and experienced with the operations of the Covered Activities and the provisions and take minimization measures of this permit. CDFW shall be notified in writing if a substitute Designated Representative is selected and if any staffing changes occur during the duration of this [Amended](#) ITP.
- 5.2 Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist has experience working in the Suisun Bay, and is knowledgeable and experienced in the biology, natural history, and collecting and handling of the Covered Species. The Designated Biologist shall be responsible for conducting the education program (refer to measure 5.4), and monthly monitoring of Covered Activities (refer to measure 6.3) to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species’ habitat. Permittee shall obtain CDFW approval of the Designated Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.
- 5.3 Boat Captain Authority. To ensure compliance with the Conditions of Approval of this [Amended](#) ITP, the Boat Captain shall have authority to immediately stop any activities, including sand mining, that are not in compliance with any permit condition in this [Amended](#) ITP.
- 5.4 Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this [Amended](#)

ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.

5.5 Monitoring Notebook. The Boat Captain shall maintain a monitoring notebook on-site, as long as this permit remains active. The notebook shall include a copy of this [Amended](#) ITP with attachments, a list of signatures of all personnel who have successfully completed the education program, and documentation of each mining event which shall include the date and time, volume and type of sand mined, volumes of water diverted, and the lease site.

5.6 Hazardous Waste. Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.

5.7 CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this [Amended](#) ITP. CDFW staff shall be provided with the necessary safety gear, if required.

9. Monitoring, Notification, and Reporting Provisions Conditions of Approval are amended as follows:

6.1 Notification Before Commencement. The Designated Representative shall notify CDFW at least 24 hours before starting Covered Activities for each season and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.

6.2 Notification of Non-Compliance. The Designated Representative shall immediately notify the CDFW Representative in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this [Amended](#) ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this [Amended](#) ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this [Amended](#) ITP to the CDFW Representative within 24 hours.

6.3 Compliance Monitoring. The Designated Biologist shall conduct monthly compliance inspections when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to (1) minimize incidental take of the

Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this [Amended](#) ITP; (4) and that Covered Activities are only occurring in the Project Area. The representative shall prepare written observation and inspection records summarizing: oversight activities, compliance inspections, and monitoring activities required by this [Amended](#) ITP.

- 6.4 Quarterly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 5.5 and 6.3 into a Quarterly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to CDFW's Regional Office at the office listed in the Notices section of this [Amended](#) ITP and via e-mail to CDFW's Regional Representatives. At the time of this [Amended](#) ITP's approval, the CDFW Bay Delta Regional Representative is ~~Ms. Crystal Spurr~~ [Mia Bianchi](#) (mia.bianchi@wildlife.ca.gov). CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.
- 6.5 Annual Status Report. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this [Amended](#) ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports for that year identified in Condition of Approval 6.4; (2) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (3) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (4) all available information about Project-related incidental take of the Covered Species; (5) an accounting of the acre-feet of water subject to disturbance and the mitigation acreage, both for the reporting calendar year, and a total since ITP issuance; and (6) information about other Project impacts on the Covered Species.
- 6.6 Final Mitigation Report. No later than 45 days after completion of all mitigation measures for the final year of the 10-year permit, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Representative shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this [Amended](#) ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more

effectively minimize take and mitigate the impacts of future projects on the Covered Species; (8) an accounting of the acre-feet of water subject to disturbance and the mitigation acreage for the 10-year permitted mining activities; and (9) any other pertinent information.

- 6.7 Notification of Take or Injury. Permittee shall immediately notify the Designated Representative if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Representative shall provide initial notification to CDFW by calling the Bay Delta Regional Office at [\(707\) 428-2002](tel:(707)428-2002) [\(707\) 944-5500](tel:(707)944-5500). The CDFW Bay Delta Regional Representative, ~~Ms. Mia Bianchi~~ [Crystal Spurr \(mia.bianchi@wildlife.ca.gov\)](mailto:mia.bianchi@wildlife.ca.gov), telephone number [\(707\) 815-8722](tel:(707)815-8722) [\(209\) 234-3442](tel:(209)234-3442) shall also be contacted. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within five (5) calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.
- 6.8 CNDDDB Observations. The Designated Representative shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.

10. Take Minimization Conditions of Approval are amended as follows:

- 7.1 Smelt Work Period Restriction. Sand mining volumes in the Middle Ground Shoal and Suisun Bay lease areas shall be restricted to a total of 108,000 cubic yards (cy) (54,000 cy for Middle Ground Shoal and 54,000 cy for Suisun Bay) from December 1 through June 30 of each year, [with the exception of 2026 where the timeframe is restricted from December 1 through April 30](#). In addition, depth restrictions will also be applied from December 1 through June 30 such that no mining will occur in depths shallower than -25 ft MLLW.
- 7.3 Location and Sand Volume Limitation. Sand mining shall be restricted to those lease areas specified in Figure 1 and Figure 2. Mining location shall be actively tracked during mining events to ensure mining does not occur outside of a lease area.

The total annual sand volumes and individual lease volumes mined shall not exceed the values listed in Table 1 on page 2 of this [Amended](#) ITP. The Permittee shall keep a log of volumes mined per Condition 5.5. Sand mining shall cease each year once the annual sand volumes are reached in each lease area.

11. Habitat Management Land Acquisition and Restoration Conditions of Approval have been amended as follows:

8. Habitat Management Land Acquisition and Restoration

CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation for the duration of this permit.

To meet this requirement, the Permittee ~~has shall~~ purchased 0.107 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank, and for this Amended ITP, Permittee shall meet the mitigation acreage requirement through the -purchase an additional 0.02 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank (refer to Condition of Approval 8.2 below). Permanent protection and funding for perpetual management of compensatory habitat required by this Amended ITP must be complete before starting Covered Activities, or within 18 months of the effective date of this Amended ITP if Security is provided pursuant to Condition of Approval 9 below for all uncompleted obligations.

8.1 Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands as follows:

The cost of Covered Species credits identified in Condition of Approval 8.2 below is estimated at \$~~24~~50,000/acre for 0.020-107 acres: \$5,000
\$16,050.00.

Since the sand mining equipment will be fitted with a screen that meets the CDFW fish screening criteria and is protective of juvenile and adult fish species, no compensation for fish loss~~ssw~~ related to Covered Activities will be required during June through December of any year that the fish screens are in place and operating. Therefore, for the purposes of calculating mitigation, the volume of water diverted during the January through May period when Covered Species eggs and larval fish will be present is 18 af.

<i>Impacts in Middle Ground Shoal and Suisun Bay</i>					
Water Year Type	Volume AF	Mitigation Ratio/AF	Weighting Factor	Frequen cy	Mitigation Acres
<i>Wet</i>	18	0.0026667	5	0.2	0.048
<i>Above Normal</i>	18	0.0026667	2	0.2	0.029
<i>Below Normal</i>	18	0.0026667	1	0.2	0.019
<i>Dry</i>	18	0.0026667	1	0.2	0.010

<i>Critical</i>	<i>18</i>	<i>0.0026667</i>	<i>1</i>	<i>0.2</i>	<i>0.010</i>
				<i>Total</i>	<i>0.127</i>

8.2 Covered Species Credits. Permittee shall purchase ~~0.02~~ **0.107** acres of Covered Species credits from a CDFW-approved mitigation or conservation bank covering smelt and salmonid habitat prior to initiating Covered Activities, or no later than 18 months from the issuance of this Amended ITP if Security is provided pursuant to Condition of Approval 9 below.

12. Performance Security Conditions of Approval have been amended as follows:

The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 8.1 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:

9.1 Security Amount. The Security for this Amended ITP shall be in the amount of ~~\$5,000~~ **\$16,050.00**. This amount is based on the cost estimates identified in Condition of Approval 8.1.1 above.

9.2 Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 2) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.

9.3 Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this Amended ITP, whichever occurs first.

9.4 Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.

9.5 Security Transmittal. If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 3) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.

9.6 Security Drawing. The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this Amended ITP.

9.7 Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:

- Written documentation of the purchase of Covered Species credits; and
- Timely submission of all required reports.

Even if Security is provided, the Permittee must complete the required purchase of Covered Species credits no later than 18 months from the effective date of this [Amended](#) ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.

13. The Amendment Section has been amended as follows:

This [Amended](#) ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

14. The Stop-Work Order Section has been amended as follows:

Stop-Work Order:

CDFW may issue Permittee a written stop-work order requiring Permittee to suspend any Covered Activity for an initial period of up to 25 days to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species. Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 25 additional days. Suspension and revocation of this [Amended](#) ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

15. The Compliance with Other Laws section has been amended as follows:

Compliance with Other Laws:

This [Amended](#) ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This [Amended](#) ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable federal, state, and local law.

16. The Notices Section has been amended as follows:

Notices:

~~The Permittee shall deliver a fully executed duplicate original ITP by registered first class mail or overnight delivery to the following address:~~

~~Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
1416 Ninth Street, Suite 1260
Sacramento, CA 95814~~

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by registered first class mail at the following address, or at addresses CDFW may subsequently provide to the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2012-012-03) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

~~Ms. Erin Chappell~~~~Mr. Scott Wilson~~, Regional Manager
California Department of Fish and Wildlife
Bay Delta Region
~~2825 Cordelia Road, Suite 100 7329 Silverado Trail~~
~~Fairfield~~~~Napa~~, CA ~~94534~~~~94558~~
Telephone (707) ~~428-2002~~ 944-5500
Fax (707) 944-5563

And a copy to:

Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
Post Office Box 944209
Sacramento, CA 94244-2090
CESA@wildlife.ca.gov

Unless Permittee is notified otherwise, CDFW's Regional Representatives for purposes of addressing issues that arise during implementation of this ITP are:

~~Ms. Mia Bianchi~~~~Crystal Spurr~~
~~2825 Cordelia Road, Suite 100 7329 Silverado Trail~~
~~Fairfield~~~~Napa~~, CA ~~94534~~~~94558~~
Telephone (707) ~~815-8722~~ (209) 234-3442
~~Mia.Bianchi@wildlife.ca.gov~~ Fax (707) 944-5563

17. The Findings Pursuant to CESA section is amended as follows:

These findings are intended to document CDFW's compliance with the specific findings requirements set forth in CESA and related regulations. [Fish and Game Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds. (a)-(b), 783.5, subd. (c)(2)].

CDFW finds based on substantial evidence in the ITP application, San Francisco Bay and Delta Sand Mining Project EIR, the results of consultations, and the administrative record of proceedings, that issuance of this [Amended](#) ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this [Amended](#) ITP will be incidental to the otherwise lawful activities covered under this [Amended](#) ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this [Amended](#) ITP and as described in the [Amended](#) MMRP. Measures include: (1) permanent habitat protection; (2) worker education; (3) establishment of shoreline and shallow water avoidance zones; (4) the installation of a positive fish screen barrier on the suction vent pipes; and (5) Quarterly, Annual, and Final Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the protection and management in perpetuity of [0.020-107](#) acres of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this [Amended](#) ITP minimizes and fully mitigates the impacts of the taking caused by the Project;
- (3) The take avoidance and mitigation measures required pursuant to the conditions of this [Amended](#) ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this [Amended](#) ITP;
- (4) The measures required by this [Amended](#) ITP maintain Permittee's objectives to the greatest extent possible;
- (5) All required measures are capable of successful implementation;
- (6) This [Amended](#) ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (7) Permittee has ensured adequate funding to implement the measures required by this [Amended](#) ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and
- (8) Issuance of this [Amended](#) ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably

available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this [Amended](#) ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

18. Attachments have been amended as follows:

FIGURE 1	Map of Middle Ground Island Shoal Site
FIGURE 2	Map of Suisun Channel Site
FIGURE 3	Map of Sand Offload Sites
ATTACHMENT 1	Amended Mitigation Monitoring and Reporting Program
ATTACHMENT 2	Letter of Credit Form
ATTACHMENT 3	Mitigation Payment Transmittal Form
<u>ATTACHMENT 4</u>	<u>Major Amendment No.2 with Track Changes</u>