California Department of Fish and Wildlife
Northern Region
619 Second Street
Eureka, CA 95501

California Endangered Species Act
Incidental Take Permit No. 2081-2018-026-01

Green Diamond Resource Company Foothill Yellow-Legged Frog Incidental Take Permit

Authority: This California Endangered Species Act (CESA) incidental take permit (ITP) is issued by the 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 take[1] 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:	**Green Diamond Resource Company**
Principal Officer:	**Neal Ewald, Sr. Vice President**
Contact Person:	**Matt House, Sr. Aquatic Biologist, (707) 668-4402**
Mailing Address:	**P.O. Box 68** **Korbel, CA 95550**

Effective Date and Expiration Date of this ITP:
This ITP shall be executed in duplicate original form and shall become effective once 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. Unless renewed by CDFW, this ITP's authorization to take the Covered Species shall expire on **June 30, 2057.** This ITP will terminate before expiration if the Covered Species ceases to be a candidate species and it is not listed for protection under the California Endangered Species Act. Suspension and early revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. This ITP may be terminated by Permittee effective 30-days after notice of termination and surrender of ITP.

Project Location:

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[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.

Green Diamond Resource Company (GDRCo) presently owns and manages approximately 365,500 acres within Humboldt and Del Norte counties of California, and may increase or decrease this total acreage through acquisitions and dispositions (Figure 1, below).

This ITP applies to all of GDRCo lands in California. The California ownership extends from the Oregon/California border, south, approximately 100 miles. The majority of GDRCo's ownership is within 20 miles of the coast, with the eastern-most tract located approximately 50 miles inland. The holdings range in size from isolated, 20-acre parcels to contiguous blocks of over 100,000 acres. While most of this land is held in fee, 3,444 acres are perpetual cutting rights, and 1,215 acres are temporary cutting rights, which expire in 2022.

Project Description:

GDRCo proposes to conduct forest management and conservation activities on its California timberland ownership for timber production and other purposes pursuant to California's Timberland Productivity Act, the Z'BergNejedly Forest Practice Act, the Board of Forestry's Forest Practice Rules, various other state laws, and GDRCo's internal management documents, policies and guidelines. The internal documents, policies and guidelines include the Aquatic Habitat Conservation Plan and Candidate Conservation Agreement with Assurances (AHCP/CCAA), an "Option (a)" document filed with the California Department of Forestry and Fire Protection, a Master Agreement for Timber Operations (MATO) as authorized CDFW and the Road Management Waste Discharge Requirements and the Forest Management Waste discharge Requirements as authorized by the North Coast Regional Water Quality Control Board. Collectively, these management documents provide the integrated strategy in which GDRCo actively manages the property as timberlands for the conservation of biological and aquatic resources.

GDRCo's objective is to obtain an ITP for the FYLF from CDFW under Section 2081, subdivision (b) for its activities to conduct timber operations and related management activities and the activities needed to carry out all the measures in the management plans. Timber operations and related management activities include but are not limited to: felling and bucking timber, yarding timber, loading and other landing operations, salvaging timber products, transporting timber and rock products, road use, road construction and maintenance, road decommissioning, rock pit construction and use, water drafting, equipment maintenance, regeneration harvest, site preparation, prescribed burning, slash treatment, planting, pre-commercial thinning and pruning, commercial thinning, instream restoration, and the collection and transport of minor forest products such as burls, stumps, boughs, and greenery.

The definition of "take" under CESA is to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (Fish and Game Code § 86). The five greatest risk factors, in order of greatest concern, for FYLF are water development and

diversion; climate change; habitat loss, urbanization and fragmentation; introduced species; and mining (Hayes et al. 2016). Timber harvest is also recognized as an activity that has the potential to alter habitat quality and impact all life stages of the FYLF (Hayes et al. 2016, Ashton et al. 2006). In general, the risk of take of FYLF from forest management is higher for activities that occur near larger streams such as those that provide breeding habitat and where densities are typically higher; and the risk of take is greatly reduced further up the watershed along smaller tributaries and further from breeding sites where densities are much lower.

Contemporary forest management activities with the Forest Practice Rules and other conservation strategies such as AHCP provide riparian and road protections of FYLF and their habitat. Since the frogs are typically found close to stream channels (GANDA 2008, Bourque 2008), which are protected with Riparian Management Zones, the risk of take from timber operations, overall, is low. However, timber operations in and near large streams and rivers, such as with watercourse crossing installations and removals, pose a higher risk of direct take compared to other timber operations. While road management strategies include practices to reduce sediment inputs that benefit aquatic species such as FYLF and their habitats, these activities can potentially adversely affect all life stages of FYLF if not adequately mitigated.

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status
Foothill Yellow-Legged Frog (*Rana boylii*)	Candidate[3]

This species and only this species is the "Covered Species" for the purposes of this ITP.

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. These activities include timber operations and related management activities such as felling and bucking timber, yarding timber, loading and other landing operations, salvaging timber products, transporting timber and rock products, road use, road construction and maintenance, road decommissioning, rock pit construction and use, water drafting, equipment maintenance, regeneration harvest, site preparation, prescribed burning, slash treatment, planting, pre-commercial thinning and pruning, commercial thinning, instream restoration, and the collection and transport of minor forest products such as burls, stumps, boughs, and greenery (i.e., Covered Activities).

[3]The species status may change following the decision of the Fish and Game Commission to designate the species as threatened or endangered but if there is such a designation, the species will remain a Covered Species.

Incidental take of individuals of the Covered Species in the form of mortality may occur as a result of Covered Activities such as crushing individuals with heavy equipment during watercourse crossing construction, log hauling or tree felling. The Covered species is at risk of being pulled into intakes during Class I watercourse or Class II watercourse drafting operations. Take may also occur during the pursuit and capture of the Covered Species during relocation efforts associated with watercourse crossing Covered Activities.

The majority of expected take of individuals of the Covered Species is expected at watercourse crossings. Table 1, below, describes the number of road crossings constructed, upgraded and decommissioned per year on GDRCo property. The Project is not expected to cause permanent loss of habitat for the Covered Species, given the balanced number of watercourse crossings decommissioned (creation of habitat) relative to new watercourse crossings constructed (removal of habitat). Temporary habitat loss (1 to 150 days per year) is expected as described in Table 1, below.

Table 1. Number of road crossings treated per year on GDRCo property by watercourse classification.

	2013	2014	2015	2016	Average
Class I	9	19	1	7	**9**
Class II	104	107	128	121	**115**
Class III	88	145	89	68	**88**
Total	**201**	**271**	**218**	**196**	**212**

Class I watercourse and river crossing construction and decommissioning activities have the highest risk of take compared to other watercourse classifications. Class I watercourses often provide breeding habitat for the Covered Species, which correlates to high densities of individuals. Take is unavoidable at most of these watercourses, and usually requires egg/frog capture and relocation efforts for mitigation. Table 1 reveals an average of 9 Class I watercourse crossing activities occurring annually on GDRCo property. These activities are either permanent or temporary bridge crossings. If approximately 3500 square feet (100 feet long by 35 feet wide) of Class I watercourse habitat is temporarily impacted during the construction of a single crossing, approximately 0.72 acres of habitat for the Covered Species are impacted temporarily on an annual basis. This is 0.01% of the total area of potential Class I watercourse habitat (6,780 acres) on GDRCo property.

Class II watercourse activities have low to moderate risk of take, given the lower densities of individuals occupying these habitats. Table 1 shows an average of 88 Class II crossing activities occurring annually on GDRCo property. These activities are permanent or temporary culvert crossings, fords, or decommissioned crossings. If approximately 1400 square feet (40 feet long by 35 feet wide) of Class II watercourse habitat is temporarily impacted during the construction of a single crossing,

approximately 3.7 acres of habitat for the Covered Species are impacted temporarily on an annual basis. This is 0.03% of the total area of potential Class II watercourse habitat (11,620 acres) on GDRCo property.

There is little to no likelihood of take resulting from Covered Activities in upland habitats or during Class III watercourse construction, given the Covered Species is highly associated with flowing streams. Class III watercourse crossing construction occurs late in the spring, summer and fall when these watercourses are typically dry. Falling trees near the watercourse as well as log hauling on saturated roads with standing water pose a minor risk of taking the Covered Species.

Water drafting occurs within various Class I watercourse and Class II watercourses across the GDRCo property. Without appropriate size screens, the Covered Species could be pulled into a water tender or tank during operations. Water drafting can also dewater and dessicate egg mass and larval life stages. The Covered Species can use seasonal Infiltration galleries, and could be crushed if these features are filled in with heavy equipment at the end of the season.

Incidental Take Authorization of Covered Species:

Incidental Take Permit No. 2081-2018-026-01 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 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 ITP, or intentional take of Covered Species, except for capture and relocation of Covered Species as authorized by this ITP.

Conditions of Approval:

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area. CDFW's issuance of this 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 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 Mitigated Negative Declaration and Initial Study, adopted by California Department of Fish and Wildlife on May 10, 2010 as lead agency for the Project

pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).

3. **LSA Agreement Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the Lake and Streambed Alteration Agreement (LSAA) (Notification No. 1600-2010-0114-R1) for the Project executed by CDFW pursuant to Fish and Game Code section 1600 et seq.

4. **ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below, and as set forth in the Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment A to this 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 ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this 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 Biologists are knowledgeable and experienced in the biology, natural history collecting and handling of the Covered Species. The Designated Biologist shall be responsible for monitoring Covered Activities 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. Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.

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 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. 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. Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.

5.6. 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 ITP.

6. Monitoring, Notification and Reporting Provisions:

6.1. Notification Before Commencement at Class I watercourse crossings. Upon review of the MATO Annual Work Plan or New Site Revisions, CDFW may require to be notified of crossing work through the amendment of specific work orders.

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

6.3. Compliance Monitoring. At Class I river crossings (eg. Mad River, Van Duzen River, Redwood Creek, etc), the Designated Biologist shall be on-site daily when bridge construction activities occur where FYLF are determined to be present. The Designated Biologist shall conduct compliance inspections to (1) conduct survey and relocation efforts; (2) minimize incidental take of the Covered Species; (3) prevent unlawful take of species; (4) check for compliance with all measures of this ITP; (5) check all exclusion zones; and (6) ensure that signs,

stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.

6.4. Population Monitoring: Starting in 2008, GDRCo has surveyed for Foothill Yellow-legged Frog egg masses on a reach of the Mad River in northern California (see Attachment B, below). Approximately 2 kilometers (or approximately one and a quarter miles) have been surveyed annually. However, the survey distance has varied in length as GDRCo formalized the survey and as the river changes. Each spring, in conjunction with the receding limb of the hydrograph, spot checks were performed at a known breeding site downstream of the survey reach to determine the onset of breeding, in an attempt to capture the peak of the breeding season. A visual encounter survey method was employed during a one-day survey in which surveyors walked the cobble/gravel bars in a downstream direction searching for egg masses. When surveyors encountered egg masses, they recorded which bank of the river they were on (right bank vs. left bank, looking downstream), GPS coordinates of egg masses, species code, number of egg masses in a given area and egg development stage. Egg development stage also accounts for egg condition based on whether or not the egg masses are stranded or desiccated. Start time, end time, start location, end location, weather conditions, air temperature and water temperature were recorded, as well. GDRCo will continue these surveys annually through the life of the permit. Results will be provided in the Annual Status Report (ASR).

In addition, GDRCo will survey approximately 50 miles of stream during the first two weeks of 2018, to assess FYLF breeding habitat across their property. The results of this survey will also be included in the 2019 ASR.

6.5. Annual Status Report. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than April 1st of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all compliance with the ITP; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Covered Activities; (5) all available information about Covered Activities-related incidental take of the Covered Species; (6) an accounting of the number of acres subject to disturbance, both for the prior calendar year, and a total since ITP issuance; and (7) information about other Project impacts on the Covered Species; (8) annual population monitoring

results.

6.6. CNDDB Observations. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the ASR.

6.7. Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of 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 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 Covered Activities on the Covered Species; and (8) any other pertinent information.

6.8. Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Covered Activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project Area. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (707) 445-6512. 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 two 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.

7. Take Minimization Measures

7.1 Class I watercourse crossings:

7.1.1 Prior to a Class I watercourse crossing installation or removal, a qualified biologist or qualified designee (knowledgeable with all life stages of FYLF and similar species) shall examine the work area (defined as the area where equipment operations will occur) and watercourse 100 feet upstream and downstream of the work area (collectively defined as the project area), to determine the presence of any life stage of FYLF.

7.1.2 Visual encounter surveys shall consist of walking the project area and visually scanning in the water and on streambanks. A minimum of three passes shall occur to ensure depletion. Additional passes shall be required if the FYLF occur on the third pass.

7.1.3 If FYLF egg masses are located within the project area, a qualified biologist shall move the egg masses out of the project area provided a suitable location upstream or downstream of the work site can be located. If a suitable location is not found, the egg masses shall be temporarily held upstream of the project area and returned upon completion of the project; or operations shall not commence until after the eggs within the project area have hatched and the tadpoles are relocated out of harm's way.

7.1.4 If FYLF tadpoles are found during the survey, a qualified biologist shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. If FYLF juveniles or adults are found during the survey, a qualified biologist or individual shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area.

7.1.5 Block nets, with less than ¼-inch mesh, shall be installed upstream and downstream of the project area to prevent migration into the work area. The top end of the block net shall be folded over to prevent juveniles and adult FYLFs climbing over the net into the project area. The nets shall extend perpendicular to at least 10 feet into wetted channel and 10 feet onto the bank, where feasible, to prevent tadpoles, juveniles and adults from migrating into the work area.

7.1.6 If the project requires more than one day to complete and FYLF were found on the first day of construction, measures 7.1.2, 7.1.3, 7.1.4 and 7.1.5 shall be implemented prior to each of the following day's construction activities.

7.2 Class II watercourse crossings:

7.2.1 During annual AHCP and THP road assessment surveys designed to identify potential road sites planned for upgrading, decommissioning or other in-channel maintenance activities, AHCP Roads Department staff and/or RPFs shall identify and document for subsequent survey(s) for Class II watercourse crossings that have potential foothill FYLF or presence of FYLFs.

7.2.2 AHCP Roads Department staff and RPFs that perform road assessments shall be trained annually by a qualified GDRCo biologist to identify FYLFs and their habitat. Their assessments shall follow GDRCo's FYLF Road Point Checklist (see Attachment C).

7.2.3 Staff performing these road assessments shall be annually trained by a qualified GDRCo biologist to identify Class II watercourses having potential FYLF habitat and FYLF.

7.2.4 Prior to operational activities associated with road decommissioning, upgrading, or other in-channel maintenance activities, a qualified biologist shall field inspect the sites identified by trained AHCP Roads Department staff and/or RPFs to confirm whether potential FYLF habitat is present.

7.2.5 If habitat for FYLF is confirmed, the work area (defined as the area where equipment operations will occur) and 100 feet upstream and 100 feet downstream of the work area (collectively defined as the project area) will be examined prior to any upgrading, decommissioning or other in-channel maintenance activities.

7.2.6 Visual encounter surveys shall consist of walking the project area and visually scanning in the water and on streambanks.

7.2.7 If FYLF egg masses are located within the project area, a qualified biologist shall move the egg masses out of the project area provided a suitable location upstream or downstream of the work site can be located. If a suitable location is not found, the egg masses shall be temporarily held upstream of the project area and returned upon completion of the project; or operations shall not commence until after the eggs within the project area have hatched and the tadpoles are relocated out of harm's way.

7.2.8 If FYLF tadpoles are found during the survey, a qualified biologist shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. If FYLF juveniles or adults are found during the survey, a qualified biologist or individual shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area.

7.2.9 Block nets, with less than ¼-inch mesh, shall be installed upstream and downstream of the project area to prevent migration into the work area. The top end of the block net shall be folded over to prevent juveniles and adult FYLFs climbing over the net into the project area.

The nets shall extend perpendicular to at least 10 feet into wetted channel and 10 feet onto the bank, where feasible, to prevent tadpoles, juveniles and adults from migrating into the work area.

7.2.10 If the project requires more than one day to complete and FYLF were found on the first day of construction, measures 7.2.6, 7.2.7, 7.2.8, and 7.2.9 shall be implemented prior to each of the following day's construction activities.

7.3 Water Drafting: All water drafting activities will be conducted according to the requirements of the MATO. If infiltration galleries are constructed, they shall not be removed at the end of the season, to avoid impacts to FYLF using the sites.

7.4 Log Hauling: Log hauling shall not occur on roads in the Riparian Management Zone (RMZ)/Watercourse Lake and Protection Zone during the winter period where saturated soil conditions exist which results in ponded water present on the running surface of roads (small puddles or water filled potholes do not constitute ponded water), unless a visual encounter survey for juvenile and adult FYLF by a qualified individual has occurred one day prior to log hauling on such roads. This protection measure does not restrict routine road maintenance activities as otherwise allowed for in THPs.

7.5 Timber Falling: In Class I watercourses and Class II watercourses with free water present, all trees shall be felled away from the watercourse. In Class III watercourses with free water present, all trees shall be felled away from the watercourse, where feasible.

7.6 Instream Restoration Projects:

7.6.1 Prior to the start of any instream restoration project, a qualified biologist or qualified designee (knowledgeable with all life stages of FYLF and similar species) shall examine the work site(s) to determine the presence of any life stage of FYLF within the work area (defined as the area where equipment operations will occur) and 100 feet upstream and 100 feet downstream (collectively defined as the project area).

7.6.2 Visual encounter surveys shall consist of walking the project area and visually scanning in the water and on streambanks. A minimum of three passes shall occur to ensure depletion. Additional passes shall be required if the FYLF occur on the third pass.

7.6.3 If FYLF egg masses are located within the project area, a qualified biologist shall move the egg masses out of the project area provided a suitable location upstream or downstream of the work site can be located. If a suitable location is not found, the egg masses shall be temporarily held upstream of the project area and returned upon completion of the project; or operations shall not commence until after the eggs within the project area have hatched and the tadpoles are relocated out of harm's way.

7.6.4 If FYLF tadpoles are found during the survey, a qualified biologist shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. If FYLF juveniles or adults are found during the survey, a qualified biologist or individual shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area.

7.6.5 Block nets, with less than ¼-inch mesh, shall be installed upstream and downstream of the project area to prevent migration into the work area. The top end of the block net shall be folded over to prevent juveniles and adult FYLFs climbing over the net into the project area. The nets shall extend perpendicular to at least 10 feet into wetted channel and 10 feet onto the bank, where feasible, to prevent tadpoles, juveniles and adults from migrating into the work area.

7.6.6 If the project requires more than one day to complete and FYLF were found on the first day of construction, measures 7.6.2, 7.6.3, 7.6.4, 7.1.4 and 7.6.5 shall be implemented prior to each of the following day's construction activities.

7.7 Invasive Species Avoidance: The *California Department of Fish and Wildlife, Aquatic Invasive Species Disinfection/Decontamination Protocol* (https://nrm.CDFW.ca.gov/FileHandler.ashx?DocumentID=92821) shall be followed and applied to field gear used to collect, relocate and block animals to ensure pathogens and parasites are not inadvertently spread between project sites.

8. Habitat Management 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 associated with the taking on the Covered Species that will

result in 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.

To meet this requirement, the Permittee shall implement the GDRCo AHCP throughout the life of the permit (2057). The AHCP will maintain and enhance key FYLF stream habitat conditions over time through Class I watercourse and Class II watercourse riparian protection and a fine sediment reduction road upgrading/decommissioning program. In addition, GDRCo shall conduct bullfrog monitoring and management on the Korbel Gravel ponds (See Item 8.2 below) through the life of the permit (2057).

8.1 GDRCo AHCP Implementation: The AHCP provides greater riparian protections and a more intensive and comprehensive road related sediment delivery reduction program when compared to the California Forest Practice's, Anadromous Salmonid Protection Rules (ASP). Attachment D provides a comparison of the AHCP and ASP protections. All AHCP riparian zones allow only a single harvest entry during the life of the AHCP (2057). Coupled with increased Class I watercourse and Class II watercourse, outer-band, overstory canopy requirements and additional buffer widths associated with Steep Streamside Slopes, the AHCP provides more robust riparian zone protections, including greater tree retention, wider width and less disturbance, compared to the ASP rules.

Standard Forest Practice Rules require road sediment delivery risk to be addressed when associated with a Timber Harvest Plan. The AHCP requires GDRCo to conduct annual property-wide assessments to prioritize treatment of roads based on likelihood of failure and potential volume of sediment delivery to watercourses. In addition, the AHCP requires GDRCo to spend 2.5 million dollars per year to treat road sites with a "high" or "moderate" priority. The GDRCo road management plan reduces road related sediment delivery at a higher rate and over a greater area, compared to the California Forest Practice Rules.

8.2 Invasive Species Management: For over ten years, GDRCo biologists have been monitoring the Korbel gravel ponds (Figure 2). Throughout that time there has not been a breeding population of bullfrogs (*Lithobates catesbeianus*) in the ponds. In an effort to keep bullfrogs from becoming established, GDRCo biologists will monitor the perennial pond adjacent to the Mad River for bullfrog presence on an annual basis. In association with annual field tours, GDRCo deploys funnel traps in the pond each April. Because larval bullfrogs require two, to three years to metamorphose in the Pacific Northwest, it will be evident during spring trapping if bullfrogs are breeding in this pond. Additionally, GDRCo biologists will perform annual surveys during the bullfrog breeding season (May – July), at least once per

month for a minimum of three surveys per year. These surveys will consist of listening for bullfrog calls as well as egg mass surveys. If bullfrogs are detected, GDRCo will conduct lethal removal of the bullfrogs (e.g., removal of egg masses and/or gigging) as additional mitigation for authorized take of FYLF.

9. Performance Security:

GDRCo has a Security in the form of a Letter of Credit (LOC) as per the Memorandum of Agreement between GDRCo and California Department of Fish and Wildlife regarding the implementation of financial assurances for the Consistency Determination based on the GDRCo AHCP/CCAA (Attachment E). Currently the amount of the LOC is set at Two Million, Nine Hundred Thousand dollars ($2,900,000.00), to be renewed annually through December 31, 2022. The principal sum of the LOC will be adjusted according to the Consistency Determination's Implementation Agreement, Section 7.4 with the new LOC amount to become effective January 1, 2023.

Amendment:

Incidental Take Permit No. 2081-2018-026-01 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 with the concurrence of the Permittee or terminated without the concurrence of the Permittee if 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 and Permittee does not concur with amendment.

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 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:

Incidental Take Permit No. 2081-2018-026-01 sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This 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:

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 Game
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 the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number 2081-2018-026-R1 in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Neil Manji, Regional Manager
California Department of Fish and Game
601 Locust Street
Redding, CA 96001
(530) 225-2363

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

CDFW
Attn: Nicholas Simpson, Timberland Conservation Program
619 Second Street
Eureka, CA 95501
(707) 445-6512

Compliance with CEQA:

CDFW's issuance of Incidental Take Permit No. 2081-2018-026-01 is subject to CEQA. CDFW is a lead agency pursuant to CEQA with respect to this ITP. (See generally Pub.

Resources Code, §§ 21067, 21069.) The lead agency's prior environmental review of the Project is set forth in the Mitigated Negative Declaration and Initial Study, adopted by CDFW on May 10, 2010. At the time the lead agency adopted the Mitigated Negative Declaration and approved the Project, it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

This 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 Mitigated Negative Declaration for the Project and the environmental effects related to issuance of this ITP (CEQA Guidelines, § 15096, subd. (f)). CDFW finds that issuance of this 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 ITP, will avoid or reduce to below a level of significance any such potential effects. CDFW consequently finds that issuance of this 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 & G. 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, Mitigated Negative Declaration, the results of site visits and consultations, and the administrative record of proceedings, that issuance of this ITP complies with and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

(1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;

(2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP. Measures include: (1) permanent habitat protection; (2) establishment of avoidance zones; (3) worker education; (4) capture and relocation efforts; (5) bullfrog management; and (6) Annual 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 implementation of the GDRCo

AHCP/CCAA and bullfrog management proposal, along with the minimization, monitoring, reporting, and funding requirements of this 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 ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;

(4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;

(5) All required measures are capable of successful implementation;

(6) This 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 ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and

(8) Issuace of this 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 ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

Attachments:

FIGURE 1	Map of Project
FIGURE 2	Map of gravel ponds adjacent to the Mad River
ATTACHMENT A	Mitigation and Monitoring Reporting Plan
ATTACHMENT B	Foothill Yellow-Legged Frog Road Point Checklist
ATTACHMENT C	Mad River Foothill Yellow-Legged Frog Egg Mass Survey Summary
ATTACHMENT D	Comparison of Green Diamond's AHCP Measures and the Anadromous Salmonid Protection Rules (ASPRs)
ATTACHMENT E	Letter of Credit

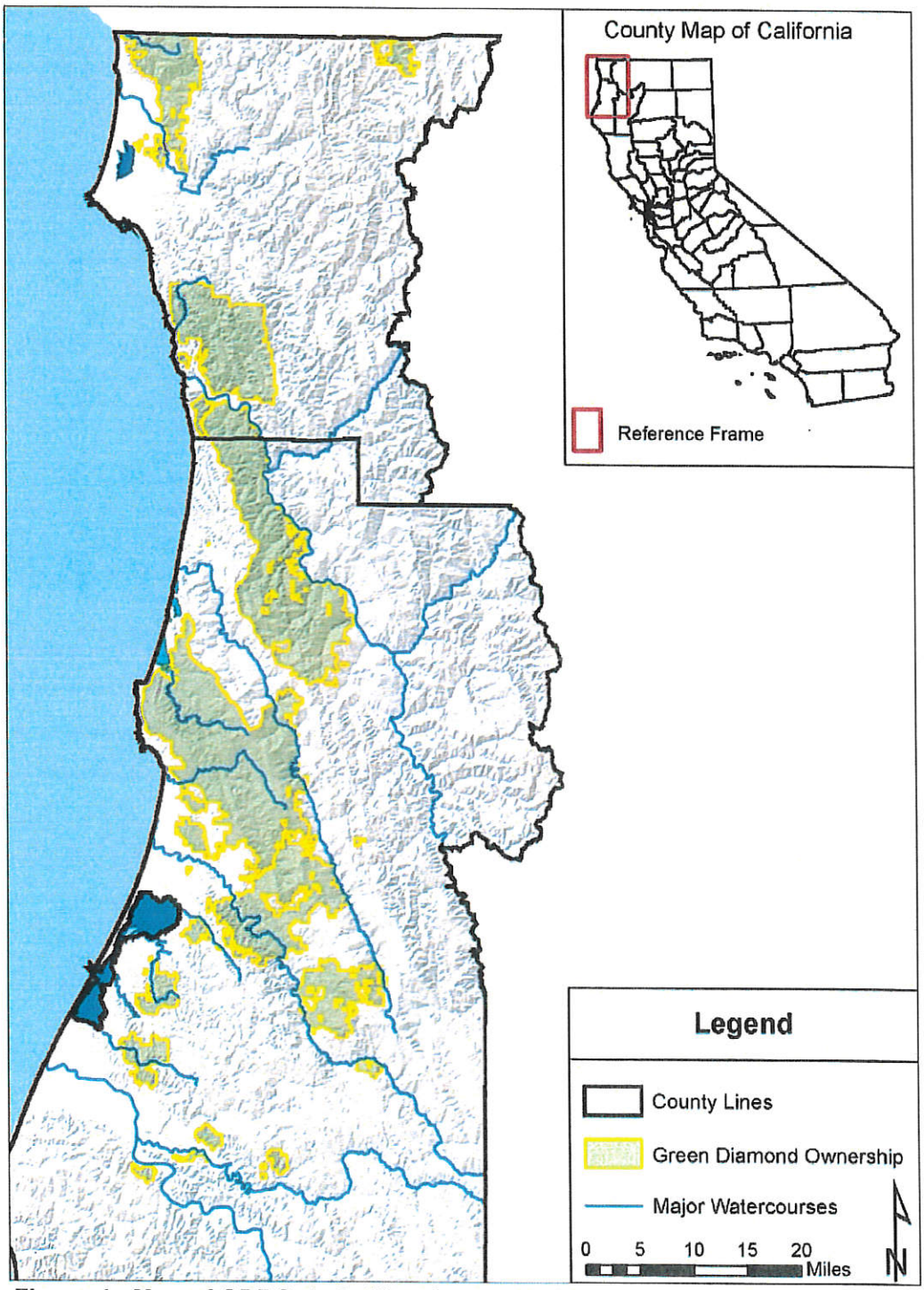

Figure 1. Map of GDRCo's California ownership

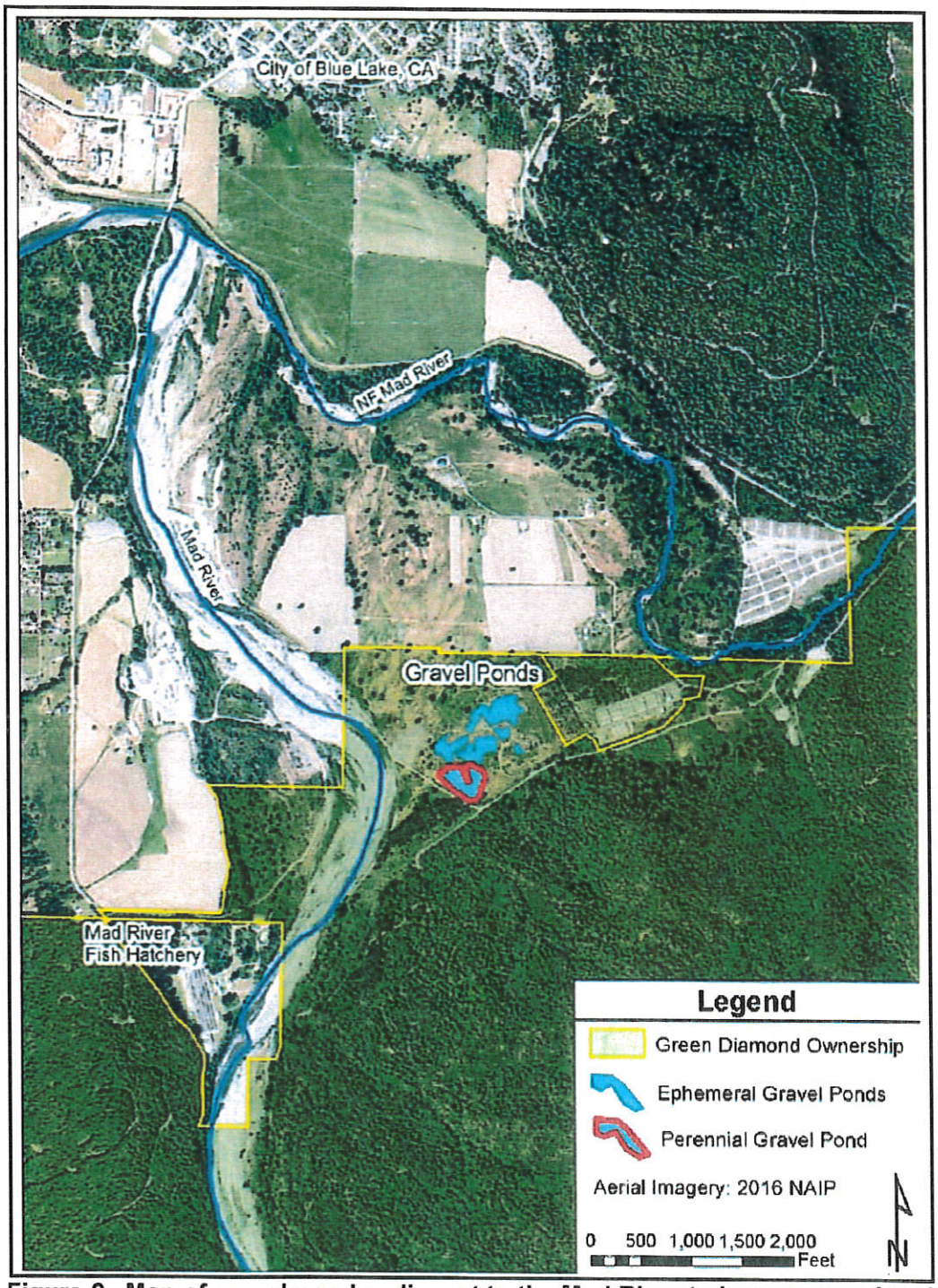

Figure 2. Map of gravel ponds adjacent to the Mad River to be asssessed and managed annually for bullfrogs.

Attachment A: Mitigation and Monitoring Reporting Program (separate document)

Attachment B: Foothill Yellow-Legged Frog Road Point Checklist

Foothill Yellow-legged Frog Road Point Checklist

*The purpose of this checklist is to aid Green Diamond Resource Company's employees and contractors in the decision making process of identifying typical Foothill Yellow-legged Frog (*Rana boylii*) habitat. We have referenced the following checklist with the current information available to characterize typical Foothill Yellow-legged Frog habitat and will review or refine this checklist with the Department as new information is collected through implementation of the permit.

Breeding and Tadpole Rearing Habitat

- **Water Present**
  - Tadpoles/eggs are usually found in shallow, slow moving water (Fuller and Lind 1992; Fellers 2005). Generally egg masses are between depths of 0 .1m- 0.6m deep (Bondi et al. 2013). After hatching larvae stay in the water where development typically takes 3-4 months depending on temperature (Fellers 2005).
- **Open to Partial Canopy**
  - *Generally*, breeding areas have an open to partial-open canopy with sunlight reaching most of the stream (Hayes and Jennings 1988; Welsh and Hodgson 2011). To our knowledge, specific canopy values for RABO breeding and rearing sites have not been documented; however, Hayes and Jennings (1988) state that post-metamorphic or larval RABO in the Sierra Nevada foothills are often found at sites with at least some shading.
- **Cobble/Boulder Dominated Substrates**
  - Breeding and rearing habitat generally consists of stream sections with variable substrates. Although gravels are often present, breeding and rearing habitat is predominated by cobble and boulder (Bondi et al. 2013; Kupferberg 1996; Yarnell 2005). RABO typically attach their egg masses to the downstream side of these substrates (Kupferberg 1996). Once hatched the tadpoles will seek shelter and forage in the interstitial spacing provided by these substrates (Ashton et al. 1998).
- **Gravel/Cobble Bar Present**
  - Often times gravel/cobble bars are associated with oviposition sites due to the creation of slackwater areas, appropriate substrate size, and low gradient shorelines (Lind et al. 1996; Kupferberg 1996).

- **Slackwater/Backwater pools (areas of slow moving water)**
  - Egg masses and tadpoles tend to be in slower moving areas of water where they remain through metamorphosis. (Lind et al. 1996; Ashton et al. 1998).

Breeding and Tadpole Rearing Timing

- **April-June**
  - Adults are observed congregating near breeding sites during these months (Kupferberg 1996). This is also a time when individuals are moving more than other times of the year. The breeding window is relatively large due to wide range distribution and wide temperature/flow ranges. Throughout the north coast breeding generally occurs from April through June with the peak usually around May (Ashton et al. 1998; Fellers 2005).
- **May-September**
  - Generally, larvae hatch within one month after eggs are deposited (depending on environmental conditions); typically tadpoles spend 3-4 months in the stream before metamorphosis, again this is dependent on environmental conditions (Fellers 2005).

Subadult and Adult (Spring and Summer Habitat)

- **Water Present**
  - RABO are described as being stream or river frogs and are generally found in or near water (Stebbins 1985).
- **Partially open (<90% canopy) to fully open**
  - During spring and summer, subadult and adult RABO can be found basking on exposed substrates (Hayes and Jennings 1988; look at the amount of sunlight hitting the stream as well as looking up to see sky exposure through the canopy). In general, RABO are associated with sites that are partially shaded and are rarely found in areas with >90% shading (Hayes and Jennings 1988). Although there is little data on RABO canopy associations on the north coast, a previous study in the Sierra Nevada foothills showed that subadult and adult RABO were most often associated with streams consisting of shading ranging from 61-80% (Hayes and Jennings 1998).

- **Gravel/Cobble/Boulder Substrates**
  - Although gravels are often present, RABO require habitat that offers refugia when escaping into the water. Cobble and boulder substrates offer interstitial spacing that provide this type of refugia and are important attributes to their habitat (Hayes and Jennings 1988). *Note: if an animal is observed jumping into the water, the observer can usually wait a short amount of time and the animal will resurface.

Subadult and Adult (Winter Habitat November-Feb)

- **Water present**
  - As mentioned previously, RABO are described as being stream or river frogs, generally found near water (Stebbins 1985). Winter months with increased rain, moisture, and higher instream flows may affect activity in this species, which has been observed overwintering in velocity-protected areas of the channel (Van Wagner 1996).
- **Partially open (<90% canopy) to fully open**
  - Winter months on the north coast do not provide basking opportunities on a consistent basis, but this habitat feature is important to look for as a part of overall habitat assessment.
- **Gravel/Cobble/Boulder Substrates**
  - Frogs need places for refuge when escaping into the water; gravel, cobble and boulder substrates are important attributes to their overwintering habitat. During winter months, RABO subadults and adults have been observed using smaller watercourses consisting of pool/riffle habitat and gravel/cobble substrates (M.Kluber, pers. obs.). Additionally, overwintering animals have been observed using root wads, vegetation, woody debris, undercut banks, and boulders for refugia along streams (Van Wagner 1996). *Note: if an animal is observed jumping into the water, the observer can usually wait a short amount of time and the animal will resurface.

Attachment C: Mad River Foothill Yellow-Legged Frog Egg Mass Survey Summary

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MAD RIVER FOOTHILL YELLOW-LEGGED FROG EGG MASS SURVEY SUMMARY

HUMBOLDT COUNTY, CALIFORNIA

JANUARY 2018

PROGRESS REPORT TO THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
WILDLIFE BRANCH – NONGAME WILDLIFE PROGRAM
PURSUANT TO THE REQUIREMENTS OF SCIENTIFIC COLLECTING PERMIT
ENTITY # 6348

ON BEHALF OF

GREEN DIAMOND RESOURCE COMPANY

GREEN DIAMOND
RESOURCE COMPANY

Introduction

Foothill Yellow-legged Frogs (*Rana boylii*) have been a Species of Special Concern in California since 1994 (Jennings and Hayes 1994). In June 2017, they were petitioned to be listed as a threatened species under the California Endangered Species Act.

Foothill Yellow-legged Frogs are small- to medium-sized frogs (37-82 mm snout-urostyle length; Hayes et al. 2016) that generally inhabit low-gradient sections of streams consisting of variable substrates, dominated by exposed cobble (Hayes and Jennings 1988). Foothill Yellow-legged Frogs oviposit their eggs from late spring through early summer, attaching their egg masses to the downstream side of rocky substrates at the stream margin in shallow, relatively slow moving water (Stebbins 2003, Fuller and Lind 1992, Ashton et al. 1998). Egg masses vary in size, but range from 5-10 cm in diameter, resembling a "cluster of grapes" (Stebbins 2003), containing anywhere from 300-2000 individual eggs per egg mass (Storer 1925, Fitch 1936, Zweifel 1955; average ~900; Ashton et al. 1998). In general, eggs hatch between 5-37 days (Zweifel 1955, Ashton et al. 1998), depending on temperature, (Zweifel 1955, Pough et al. 2004) with tadpoles typically metamorphosing 3-4 months after hatching (Zweifel 1955). Tadpole rearing locations consist of the same shallow, slow moving water habitat as oviposition sites (Hayes et al 2016).

This progress report summarizes the monitoring efforts conducted by Green Diamond Resource Company (GDRCo) along a reach of the Mad River, Humboldt County, California. This survey has been performed annually since 2008, providing nearly a decade of Foothill Yellow-legged Frog breeding information.

Methods

Starting in 2008, GDRCo surveyed for Foothill Yellow-legged Frog egg masses on a reach of the Mad River in northern California (Figure 1). Approximately 2 kilometers (km) have been surveyed annually. However, the survey distance has varied in length as we formalized the survey and as the river changes. Each spring, in conjunction with the receding limb of the hydrograph, spot checks were performed at a known breeding site downstream of the survey reach to determine the onset of breeding, in an attempt to capture the peak of the breeding season. A visual encounter survey method was employed during a one day survey in which surveyors walked the cobble/gravel bars in a downstream direction searching for egg masses. When surveyors encountered egg masses, they recorded which bank of the river they were on (right bank vs. left bank, looking downstream), GPS coordinates of egg masses, species code (as Western Toad (*Anaxyrus boreas*) egg strings are also encountered), number of egg masses in a given area and egg development stage. Egg development stage also accounts for egg condition based on whether or not the egg masses are stranded or desiccated. Start time, end time, start location, end location, weather conditions, air temperature and water temperature were recorded, as well.

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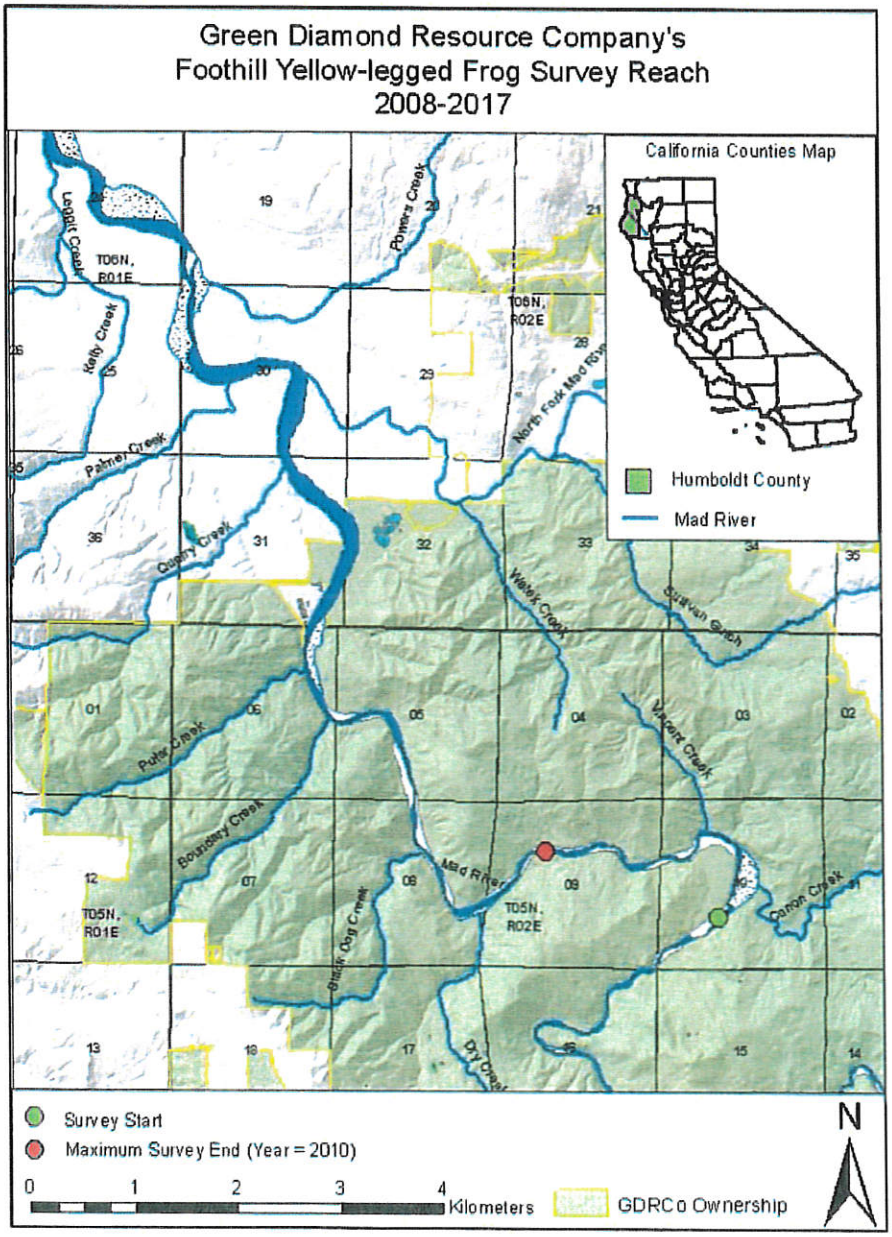
Figure 1. Foothill Yellow-legged Frog egg mass survey reach on the Mad River, Humboldt County, California.



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Results

Since 2008, 5,556 Foothill Yellow-legged Frog egg masses have been detected, ranging from ~71 to ~625 egg masses per kilometer (km^{-1}) per year (Table 1). The annual average density of egg masses over the past 10 years of surveys has been 257.8 egg masses km^{-1}. In 2009, the highest known density of egg masses (323.6 km^{-1}) for this species was documented on this reach (Bourque and Bettaso 2011). During the 2016 survey 371.7 egg masses km^{-1} were detected, slightly higher (~13%) than what was reported from the 2009 survey. The number of egg masses detected in 2017 exceeded 2016 numbers by 59%, with 625.1 egg masses km^{-1} (Table 1). Out of the 1469 egg masses observed throughout the survey reach in 2017, 92 (6% of the total egg masses observed) were found to be stranded out of the water and desiccated.

Table 1. Distance surveyed per year and number of egg masses detected per year, per kilometer within Green Diamond Resource Company's monitoring reach on the Mad River, Humboldt County, California.

Year	Date	Distance Surveyed (km)	Egg Masses Detected	Egg Masses per km
2008	5/13/2008	0.362	89	245.86
2009	5/31/2009	2.250	728	323.56
2010	6/13/2010	3.031	233	76.87
2011	6/25/2011	1.929	138	71.54
2012	6/9/2012	2.447	535	218.64
2013	5/19/2013	2.351	477	202.89
2014	5/15/2014	2.167	275	126.90
2015	5/11/2015	2.363	744	314.85
2016	5/25/2016	2.335	868	371.73
2017	6/1/2017	2.350	1469	625.11
Totals:	10	21.585	5556	N/A
Averages:	5/28	2.159	555.6	257.79

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Discussion

Bourque and Bettaso (2011) stated that their 2009 Mad River egg mass densities were the highest density recorded (323.56 egg masses km^{-1}) compared to 27 other rivers or streams in northern California that Kupferberg et al. (2012) reported on (maximum density: 176.9 egg masses km^{-1}, average density: 16 egg masses km^{-1}). To our knowledge, the densities observed in our 2017 Foothill Yellow-legged Frog egg mass survey are now the highest density documented to date, well exceeding the previous highest recorded density by almost 60% (Table 1). For comparison, the California Department of Fish and Wildlife surveys a 13.5 km reach downstream from the GDRCo Mad River reach and observed 58.8 egg masses km^{-1} in 2011, 73.1 egg masses km^{-1} in 2015 and 38.8 egg masses km^{-1} in 2016 (Van Hattem, pers comm. 2017). Females only produce one clutch per year (Zweifel 1955), making egg mass surveys an effective way of quantifying breeding female populations (Wheeler and Welsh 2008). Based on the number of egg masses encountered during GDRCo's surveys, the Foothill Yellow-legged Frog sub-population within our survey reach on the Mad River appears to be robust.

Acknowledgements

This project would not have gotten off the ground without Ryan Bourque initiating and Lowell Diller supporting the collection of data that has certainly proved to be important. We would like to thank all of the employees that have contributed to the collection of data for this project over the past 9 years. While there are too many to list here, more recently we would like to acknowledge the following: Matt Kluber, William Devenport, David Dimitrie and Pat Righter, who have contributed to the collection, storage and summarization of the data. We thank Mike Van Hattem (CDFW) for assisting with the 2017 GDRCo egg mass surveys. We thank Matt House for reviewing this progress report and offering technical and logistical advice. Finally, we thank the state of California, specifically the Wildlife Branch, for continuing to issue GDRCo with Scientific Collecting Permits for projects like this.

GREEN DIAMOND RESOURCE COMPANY

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Attachment D: Comparison of Green Diamond's AHCP Measures and the Anadromous Salmonid Protection Rules (ASPRs)

AHCP

Riparian Measures

Class I Protections (confined)

- Single entry into RMZ during life of plan
- 150 foot minimum width
- 85% overstory canopy on inner 50-70 feet
- 70% overstory canopy on outer zone
- No trees harvested judged likely to recruit in Class I RMZ
- Salvage in outer zone only when non-functional criteria are met
- Retain all safe snags

Inner Zone Width Specifications

Side Slopes	Inner Zone Width
0-30%	50 feet
30-60%	60 feet
>60%	70 feet

Class I Protections (unconfined)

- Same as above plus:
  - No harvest in channel migration zone
  - If floodplain is wider than 150 feet, the outer zone extends to outer edge of floodplain
  - Apply an additional floodplain buffer to the RMZ depending on side slope

Additional Floodplain Buffer Widths

Side Slopes	Additional Floodplain Buffer
0-30%	30 feet
30-60%	40 feet
>60%	50 feet

ASP Rules

Class I Protections (confined)

- 150 foot minimum width
- Restricted harvest Core Zone on inner 30 feet
- Inner Zone: 80% overstory canopy on next 70 feet and
- Retain the 13 largest trees/ac from the area that encompasses the core and inner zones
- Outer Zone: 50% overstory canopy on outer 50 feet

Class I Protections (unconfined)

- 150 foot minimum width
- No harvest in channel migration zone
- Restricted harvest Core Zone on inner 30 feet
- Inner Zone A: 80% overstory canopy on next 70-120 feet
- Retain the 13 largest trees/ac from the area that encompasses the core and inner zones
- Inner Zone B: 50% overstory canopy on outer edge of floodplain if floodplain is wider than 150 feet
- Outer Zone: 50% overstory canopy on outer 50 feet

AHCP

ASP Rules

Class II-1 Protections

- Single entry into RMZ during the life of the plan
- Variable 75 foot width
  - 75 foot zone on the first 1,000 feet of 1st order Class II (Class II-1) watercourses. Downstream of this first 1,000 foot section, the RMZ will be expanded to at least 100 feet (Class II-2).
  - 100 foot zone on all 2nd order or larger Class II (Class II-2) watercourses
- 85% overstory canopy on inner 30 feet
- 70% overstory canopy on outer zone
- No trees harvested that are essential for bank stability
- Salvage in outer zone only when non-functional criteria are met
- Retain all safe snags

Class II-2 Protections

- Single entry into RMZ during the life of the plan
- 100 foot width
  - Downstream of this first 1,000 foot section of a Class II-1, the RMZ will be at least 100 feet.
  - 100 foot zone on all 2nd order or larger Class II (Class II-2) watercourses
- 85% overstory canopy on inner 30 feet
- 70% overstory canopy on outer zone
- No trees harvested that are essential for bank stability
- Salvage in outer zone only when non-functional criteria are met
- Retain all safe snags

Class II-S (Standard) Protections

- 50-100 foot variable width depending on side slopes
- Restricted harvest Core Zone on first 15 feet for slopes ≥ 10%
- 50% overstory canopy on remaining inner zone
- Retain the 13 largest trees/ac from the area that encompasses the core and inner zones

Class II-S Zone Width Specifications

Side Slopes	Class II-S Zone Width
<30%	50 feet
30-50%	75 feet
>50%	100 feet

Class II-L (Large) Protections

- 100 foot width
- Restricted harvest Core Zone on first 30 feet
- 80% overstory canopy on remaining inner zone
- Retain the 13 largest trees/ac from the area that encompasses the core and inner zones

AHCP

Class III Protections

Class III Tier A – (side slopes < HPA Group threshold)

- 30 foot EEZ and retain LWD

Class III Modified Tier A– (side slopes < HPA Group threshold within selected GD tracts and in coho planning watersheds where highly erodible soils exist)

- 30 foot EEZ and retain LWD
- retain all sub-merchantable conifers
- retain 15 ft^2 of basal area of hardwoods per acre
- Retain all channel zone trees

Class III Tier B – (side slopes > HPA Group threshold)

- 50 foot EEZ
- retain all hardwoods and sub-merchantable conifers, and average 1 merchantable conifer every 50 feet
- retain conifers that are essential for bank stability or act as channel controls

HPA Group Threshold Gradients

HPA Group	HPA	Slope Gradient
Smith River	Smith River	< 65% = Tier A ≥ 65% = Tier B
Coastal Klamath	Coastal Klamath Blue Creek	< 70% = Tier A ≥ 70% = Tier B
Korbel	Interior Klamath Redwood Creek Coastal Lagoons Little River Mad River (Lower and NF)	< 65% = Tier A ≥ 65% = Tier B
Humboldt Bay	Humboldt Bay Eel River	< 60% = Tier A ≥ 60% = Tier B

ASP Rules

Class III Protections

- 30 foot EEZ on slopes <30%
- 50 foot EEZ on slopes ≥30%
- Retain all down wood
- Retain hardwoods where feasible and tress that provide bank/bed stability

AHCP

AHCP Geologic Measures that add Riparian Function

Steep Streamside Slopes

SSS Threshold Gradients

Revised HPA Groups and Slope Gradient Threshold			
SSS HPA Group	**HPAs**		**Slope Gradient**
Smith River (Includes Wilson Creek)	Smith River		65%
Interior Klamath	Interior Klamath		65%
Korbel	Coastal Lagoons, Little River, Redwood Creek, North Fork Mad River, Mad River, Humboldt Bay, Eel River		55%
	Coastal Klamath HPA		
	Class I	Class II-2	Class II-1
Coastal Klamath HPA Group (SSSMU 1)	65%	70%	75%
Coastal Klamath HPA Group (SSSMU 2)	75%	85%	
Note: (a) Coastal Klamath HPA was broken into two distinct Steep Streamside Slope Morphologic Units (SSSMU) based on data from the SSS Delineation project. As a result there are specific slope gradient thresholds for each SSSMU and watercourse Class (except for Class II-1 streams where there was insufficient data to delineate gradients for both SSSMUs). (b) Minimum area assessed; The average slope gradient must exceed the slope threshold for at least 100 feet of lineal stream distance to be considered a SSS zone.			

In areas with identified SSS, establish a SSS zone of width and prescription specified in the table below, each comprised of an inner Riparian Slope-stability Management Zone (RSMZ), and outer RSMZ, and a Slope-stability Management Zone (SMZ).

AHCP

Summary Table of Revised SSS Prescriptions

Watercourse	Inside RSMZ and within Steep Streamside Slope Zone		SMZ (Outside RSMZ but within Steep Streamside Slope Zone) Extends to maximum slope distance or to qualifying break-in-slope (whichever is shorter)				
	Inner Zone[a]	Outer Zone[a]	Korbel HPA Group	Interior Klamath HPA Group	Coastal Klamath HPA Group		Smith River HPA Group
	(see HPA for minimum slope gradient)	*(see HPA for minimum slope gradient)*	*(≥55% slopes)*	*(≥65% slopes)*	*SSSMU 1*	*SSSMU 2*	*(≥65% slopes)*
Class I	*(0-70 feet)*	*(70-150 feet)* [b]	*NA*	*(150 – 195 feet)*	*(150-240 feet, ≥65% slopes)*	*(150-425 feet, ≥75% slopes)*	*NA*
	• No cut • No new roads or major road reconstruction without approved review	• 85% overstory canopy retention. • Harvest biased to redwood and only if unlikely to recruit. • No new roads or major road reconstruction without approved review	1. No SMZ[C]	• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review	• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review	• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review	• No SMZ[C]
Class II-2	*(0-30 feet)*	*(30-100 feet)* [d]	*(100-110 feet)*	*NA*	*(100-110 feet, ≥70% slopes)*	*(100-195 feet, ≥85% slopes)*	*NA*
	• No cut • No new roads or major road reconstruction without approved review	• 85% overstory canopy retention. • Harvest biased to redwood and only if unlikely to recruit. • No new roads or major road reconstruction without approved review	• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review	1. No SMZ [C]	• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review	• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review	• No SMZ[C]
Class II-1	*(0-30 feet)*	*(30-75 feet)*	*(75-105 feet)*	*(75-90 feet)*	*(75-135 feet, ≥75% slopes)*		*(75-80 feet)*
	• 85% overstory canopy retention. • Harvest biased to redwood and only if unlikely to recruit. • No new roads or major road reconstruction without approved review	• 75% overstory canopy retention. • No new roads or major road reconstruction without approved review	• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review	• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review	• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review		• Single tree selection with even spacing of residual conifers • Hardwood retention • No new roads or major road reconstruction without approved review

Footnotes

a) Listed default prescriptions apply to the Smith River, Interior Klamath, and Korbel HPA Groups. The Coastal Klamath HPA Group prescriptions for the entire RSMZs are no harvest and no new roads or major road reconstruction without approved geologic review. The slope distance for RSMZs in the Coastal Klamath HPA Group is the same as described for the other HPA Groups (i.e. 150,100, & 75 feet). Trees may be felled for cable corridors or as needed for worker safety).

b) The maximum Smith River RSMZ width is 100' & the maximum Korbel RSMZ width is 135'.

c) The maximum SSS distance is equal to or less than the total RSMZ width.

d) The maximum Smith River RSMZ width is 75'.

AHCP

AHCP Geologic Measures that add Riparian Function

Headwall Swales

- Single entry into headwall swale during life of plan
- Single tree selection with even spacing (all species and size classes represented in pretreatment stands will be represented post harvest)
- Retain all hardwoods

Attachment E: Letter of Credit

EXHIBIT A TO MEMORANDUM OF AGREEMENT

Proposed Form of
STANDBY LETTER OF CREDIT
Providing Financial Assurances For
CONSISTENCY DETERMINATION BASED ON AQUATIC HABITAT CONSERVATION PLAN

BANK OF AMERICA - CONFIDENTIAL

STANDBY LETTER OF CREDIT No. _____

DATE:

ISSUING BANK
Bank of America, N.A.
1000 West Temple Street, 7th Floor
CA 9-705-07-05
Los Angeles, CA 90012-1514

TO BENEFICIARY:

California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, California, 95814
Attention: Director

Dear Sir or Madam:

1. At the request and on the instructions of our CUSTOMER, Green Diamond Resource Company ("Permittee"), we hereby establish in favor of the BENEFICIARY, the California Department of Fish and Game ("CDFG"), this Irrevocable Standby Letter of Credit ("Credit") in the Principal Sum of $2,500,000.00.

2. We are advised this Credit is established for the benefit of the BENEFICIARY, pursuant to CDFG's consistency determination based on the terms of the Aquatic Habitat Conservation Plan and Candidate Conservation Agreement with Assurances ("Plan"), approved by the National Marine Fisheries Service and the U.S. Fish & Wildlife Service ("Services") on June 12, 2007.

3. We are further advised, this Credit is intended by the Permittee, and the BENEFICIARY to serve as a security device for the performance by Permittee of its obligations under the Plan that is the basis for CDFG's consistency determination, and that certain

Memorandum of Agreement between Green Diamond and CDFG, dated March ___, 2008.

4. The BENEFICIARY shall be entitled to draw upon this Credit by presentation of a duly executed CERTIFICATE OF DRAWING in the same form as Attachment A hereto, at our office located at 1000 West Temple Street, 7th Floor, CA9-705-07-05, Los Angeles, CA 90012-1514, Attn: Standby Letter of Credit Dept. ("ISSUER").

5. The CERTIFICATE OF DRAWING shall be completed and signed by the "Authorized Representative" of the BENEFICIARY as defined in paragraph 12 below. Presentation by the BENEFICIARY of a completed CERTIFICATE OF DRAWING may be made in person or by registered mail, return receipt requested.

6. Upon presentation of a duly executed CERTIFICATE OF DRAWING as provided above, payment in immediately available funds shall be made to the BENEFICIARY in the manner provided on the CERTIFICATE OF DRAWING.

7. Funds may be drawn in one or more drawings not to exceed the Principal Sum in any calendar year.

8. If a demand for payment does not conform to the terms of this Credit, the ISSUER shall provide the BENEFICIARY with prompt notice that the demand for payment was not affected in accordance with the terms of this Credit, state the reasons therefore, and await further instructions.

9. Upon being notified that the demand for payment was not affected in conformity with the Credit, the BENEFICIARY may correct any such non-conforming demand for payment prior to the expiration of the Credit.

10. All drawings under this Credit shall be paid with ISSUER'S funds. Each drawing honored by ISSUER hereunder shall reduce the Principal Sum provided as Credit for a calendar year. By paying to the BENEFICIARY an amount demanded in accordance herewith, ISSUER makes no representations as to the correctness of the amount demanded.

11. BENEFICIARY shall cancel this Credit by providing ISSUER with a CERTIFICATE OF CANCELLATION, which (i) shall be in the form of Attachment B hereto; (ii) shall be completed and signed by the Authorized Representative of the BENEFICIARY as defined in Paragraph 12 below; and (iii) shall be accompanied by the surrender of this Credit.

12. The "Authorized Representative" is the Director of the California Department of Fish and Game.

13. Communications with respect to this Credit shall be in writing and addressed to 1000 West Temple Street, 7th Floor, CA9-705-07-05, Los Angeles, CA 90012-1514, Attn:

Standby Letter of Credit Dept. with reference made to this Credit number.

14. This Credit is subject to and governed by Article 5 of Uniform Commercial Code of the State of California.

THEREFORE, _____ has executed and delivered this Irrevocable Standby Letter of Credit to the Beneficiary as of this ____ day of _____.

References:

Ashton, D.T.; Marks, S.B.; Welsh, H.H., Jr. 2006. Evidence of continued effects from timber harvesting on lotic amphibians in redwood forests of northwestern California. Forest Ecology and Management. 221: 183–193.

Bourque, R.M. 2008. Spatial ecology of an inland population of the Foothill Yellowlegged Frog (*Rana boylii*) in Tehama County, California. MA Thesis, Humboldt State University, Arcata, CA. 93 p

Garcia and Associates (GANDA). 2008. Identifying microclimatic and water flow triggers associated with breeding activities of a foothill yellow-legged frog (*Rana boylii*) population on the North Fork Feather River, California. California Energy Commission, PIER Energy Related Environmental Research Program. CEC-500- 2007-041.

Hayes, Marc P.; Wheeler, Clara A.; Lind, Amy J.; Green, Gregory A.; Macfarlane, Diane C., tech. coords. 2016. Foothill yellow-legged frog conservation assessment in California. Gen. Tech. Rep. PSW-GTR-248. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 193 p.

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND GAME

on 7/12/2018

Neil Manji, Regional Manager
REGION 1

ACKNOWLEDGMENT

The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of this ITP, and (3) agrees on behalf of the Permittee to comply with all terms and conditions

By: _____ Date: 7/9/18

Printed Name: NEAL D. EWALD Title: SENIOR VICE PRESIDENT

Attachment A

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
MITIGATION MONITORING AND REPORTING PROGRAM (THIS MMRP)
CALIFORNIA ENDANGERED SPECIES ACT

INCIDENTAL TAKE PERMIT NO. 2081-2018-026-01

PERMITTEE: **Green Diamond Resource Company**

PROJECT: **Foothill Yellow-Legged Frog Incidental Take Permit**

PURPOSE OF THE THIS MMRP

The purpose of the THIS MMRP is to ensure that the impact minimization and mitigation measures required by the Department of Fish and Wildlife (CDFW) for the above-referenced Project are properly implemented, and thereby 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 (below). This table is guidance for monitoring and reporting the 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 (below).

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 or Monitoring Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE DISTURBING SOIL OR VEGETATION					
1	Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.	ITP Condition # 5.1	Before commencing any project related ground- or vegetation-disturbing activities Annually	Permittee	
2	Permittee shall submit to CDFW, in writing, the name, qualifications, business address, and contact information of biological monitor(s) (Designated Biologist(s)) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist(s) are knowledgeable and experienced in the biology, natural history collecting and handling of the Covered Species. The Designated Biologist(s) shall be responsible for monitoring Covered Activities 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(s) in writing before starting Covered Activities, and shall also obtain approval in advance, in writing, if the Designated Biologist(s) must be changed.	ITP Condition # 5.2	Before commencing any project related ground- or vegetation-disturbing activities Annually	Permittee	
3	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 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. 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 any project related ground- or vegetation-disturbing activities Annually	Permittee	
4	Upon review of the MATO Annual Work Plan or New Site Revisions, CDFW may require to be notified of crossing work through the amendment of specific work orders.	ITP Condition # 6.1	Before commencing any project related ground- or vegetation-disturbing activities Annually	Permittee	

	Mitigation or Monitoring Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
DURING CONSTRUCTION					
5	The Designated Representative shall immediately notify CDFW in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this ITP to CDFW within 24 hours.	ITP Condition # 6.2	Annually	Permittee	
6	At Class I river crossings (eg. Mad River, Van Duzen River, Redwood Creek, etc), the Designated Biologist(s) shall be on-site daily when bridge construction activities occur where FYLF are determined to be present. The Designated Biologist shall conduct compliance inspections to (1) conduct survey and relocation efforts; (2) minimize incidental take of the Covered Species; (3) prevent unlawful take of species; (4) check for compliance with all measures of this ITP; (5) check all exclusion zones; and (6) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist(s) shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.	ITP Condition # 6.3	Annually	Permittee	

	Mitigation or Monitoring Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
7	At Class I watercourse crossings: 7.1.1 Prior to a Class I watercourse crossing installation or removal, a qualified biologist or qualified designee (knowledgeable with all life stages of FYLF and similar species) shall examine the work area (defined as the area where equipment operations will occur) and watercourse 100 feet upstream and downstream of the work area (collectively defined as the project area), to determine the presence of any life stage of FYLF. 7.1.2 Visual encounter surveys shall consist of walking the project area and visually scanning in the water and on streambanks. A minimum of three passes shall occur to ensure depletion. Additional passes shall be required if the FYLF occur on the third pass. 7.1.3If FYLF egg masses are located within the project area, a qualified biologist shall move the egg masses out of the project area provided a suitable location upstream or downstream of the work site can be located. If a suitable location is not found, the egg masses shall be temporarily held upstream of the project area and returned upon completion of the project; or operations shall not commence until after the eggs within the project area have hatched and the tadpoles are relocated out of harm's way. 7.1.4If FYLF tadpoles are found during the survey, a qualified biologist shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. If FYLF juveniles or adults are found during the survey, a qualified biologist or individual shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. 7.1.5Block nets, with less than ¼-inch mesh, shall be installed upstream and downstream of the project area to prevent migration into the work area. The top end of the block net shall be folded over to prevent juveniles and adult FYLFs climbing over the net into the project area. The nets shall extend perpendicular to at least 10 feet into wetted channel and 10 feet onto the bank, where feasible, to prevent tadpoles, juveniles and adults from migrating into the work area. 7.1.6 If the project requires more than one day to complete and FYLF were found on the first day of construction, measures 7.1.2, 7.1.3, 7.1.4 and 7.1.5 shall be implemented prior to each of the following day's construction activities.	ITP Condition # 7.1	Annually	Permittee	

	Mitigation or Monitoring Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
8	At Class II watercourse crossings: 7.2.1 During annual AHCP and THP road assessment surveys designed to identify potential road sites planned for upgrading, decommissioning or other in-channel maintenance activities, AHCP Roads Department staff and/or RPFs shall identify and document for subsequent survey (c) Class II watercourse crossings that have potential foothill FYLF or presence of FYLFs. 7.2.2 AHCP Roads Department staff and RPFs that perform road assessments shall be trained annually by a qualified GDRCo biologist to identify FYLFs and their habitat. Their assessments shall follow GDRCo's FYLF Road Point Checklist (Attachment A). 7.2.3 Staff performing these road assessments shall be annually trained by a qualified GDRCo biologist to identify Class II watercourses having potential FYLF habitat and FYLFs. 7.2.4 Prior to operational activities associated with road decommissioning, upgrading, or other in-channel maintenance activities, a qualified biologist shall field inspect the sites identified by trained AHCP Roads Department staff and/or RPFs to confirm whether potential FYLF habitat exists. 7.2.5 If habitat for FYLF is confirmed, the work area (defined as the area where equipment operations will occur) and 100 feet upstream and downstream of the work area (collectively defined as the project area) will be examined prior to any upgrading, decommissioning or other in-channel maintenance activities. 7.2.6 Visual encounter surveys shall consist of walking the project area and visually scanning in the water and on streambanks. 7.2.7 If FYLF egg masses are located within the project area, a qualified biologist shall move the egg masses out of the project area provided a suitable location upstream or downstream of the work site can be located. If a suitable location is not found, the egg masses shall be temporarily held upstream of the project area and returned upon completion of the project; or operations shall not commence until after the eggs within the project area have hatched and the tadpoles are relocated out of harm's way. 7.2.8 If FYLF tadpoles are found during the survey, a qualified biologist shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. If FYLF juveniles or adults are found during the survey, a qualified biologist or individual shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. 7.2.9 Block nets, with less than ¼-inch mesh, shall be installed upstream and downstream of the project area to prevent migration into the work area. The top end of the block net shall be folded over to prevent juveniles and adult FYLFs climbing over the net into the project area. The nets shall extend perpendicular to at least 10 feet into wetted channel and 10 feet onto the bank, where feasible, to prevent tadpoles, juveniles and adults from migrating into the work area. 7.2.10 If the project requires more than one day to complete and FYLF were found on the first day of construction, measures 7.2.6, 7.2.7, 7.2.8 and 7.2.9 shall be implemented prior to each of the following day's construction activities.	ITP Condition # 7.2	Annually	Permittee	

	Mitigation or Monitoring Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
9	All water drafting activities will be conducted according to the requirements of the MATO. If infiltration galleries are constructed, they shall not be removed at the end of the season, to avoid impacts to FYLF using the sites.	ITP Condition # 7.3	Annually	Permittee	
10	Log hauling shall not occur on roads in the Riparian Management Zone (RMZ) /Watercourse Lake and Protection Zone (WLPZ) during the winter period where saturated soil conditions exist which results in ponded water present on the running surface of roads (small puddles or water filled potholes do not constitute ponded water), unless a visual encounter survey for juvenile and adult FYLFs by a qualified individual has occurred one day prior to log hauling on such roads. This protection measure does not restrict routine road maintenance activities as otherwise allowed for in THP's.	ITP Condition # 7.4	Annually	Permittee	
11	In Class I and Class II watercourses with free water present, all trees shall be felled away from the watercourse. In Class III watercourses with free water present, all trees shall be felled away from the watercourse, where feasible.	ITP Condition # 7.5	Annually	Permittee	

	Mitigation or Monitoring Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
12	Instream Restoration Projects: 7.6.1 Prior to the start of any instream restoration project, a qualified biologist or qualified designee (knowledgeable with all life stages of FYLFs and similar species) shall examine the work site(s) to determine the presence of any life stage of FYLF within the work area (defined as the area where equipment operations will occur) and 100 feet upstream and downstream (collectively defined as the project area). 7.6.2 Visual encounter surveys shall consist of walking the project area and visually scanning in the water and on streambanks. A minimum of three passes shall occur to ensure depletion. Additional passes shall be required if the FYLF occur on the third pass. 7.6.3If FYLF egg masses are located within the project area, a qualified biologist shall move the egg masses out of the project area provided a suitable location upstream or downstream of the work site can be located. If a suitable location is not found, the egg masses shall be temporarily held upstream of the project area and returned upon completion of the project; or operations shall not commence until after the eggs within the project area have hatched and the tadpoles are relocated out of harm's way. 7.6.4If FYLF tadpoles are found during the survey, a qualified biologist shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. If FYLF juveniles or adults are found during the survey, a qualified biologist or individual shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. 7.6.5Block nets, with less than ¼-inch mesh, shall be installed upstream and downstream of the project area to prevent migration into the work area. The top end of the block net shall be folded over to prevent juveniles and adult FYLFs climbing over the net into the project area. The nets shall extend perpendicular to at least 10 feet into wetted channel and 10 feet onto the bank, where feasible, to prevent tadpoles, juveniles and adults from migrating into the work area. 7.6.6 If the project requires more than one day to complete and FYLF were found on the first day of construction, measures 7.6.2, 7.6.3, 7.6.4 and 7.6.5 shall be implemented prior to each of the following day's construction activities.	ITP Condition # 7.6	Annually	Permittee	
13	California Department of Fish and Wildlife, Aquatic Invasive Species Disinfection/Decontamination Protocol (https://nrm.CDFW.ca.gov/FileHandler.ashx?DocumentID=92821) shall be used on field gear used to collect, relocate and block animals to ensure pathogens and parasites are not inadvertently spread between project sites.	ITP Condition # 7.7	Annually	Permittee	

	Mitigation or Monitoring Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
14	To ensure compliance with the Conditions of Approval of the ITP, the Designated Biologist shall have authority to immediately stop any activity that does not comply with the ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.	ITP Condition # 5.3	Annually	Permittee	
15	Permittee shall immediately notify the Designated Biologist(s) 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 Biologist(s) or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (707) 445-6512. 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 two 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 # 5.2	Annually	Permittee	
POST-CONSTRUCTION					
16	Permittee shall provide CDFW with an Annual Status Report (ASR) no later than April 1st of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all compliance with the ITP; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Covered Activities; (5) all available information about Covered Activities-related incidental take of the Covered Species; (6) an accounting of the number of acres subject to disturbance, both for the prior calendar year, and a total since ITP issuance; and (7) information about other Project impacts on the Covered Species; (8) annual population monitoring results.	ITP Condition # 6.5	Entire Project	Permittee	
17	The Designated Biologist(s) shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDB) within 60 calendar days of the observation and the Designated Biologist(s) shall include copies of the submitted forms with the ASR.	ITP Condition #6.6	Entire Project	Permittee	

	Mitigation or Monitoring Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
18	Starting in 2008, GDRCo has surveyed for Foothill Yellow-legged Frog egg masses on a reach of the Mad River in northern California (see Attachment B, below). Approximately 2 kilometers (or approximately one and a quarter miles) have been surveyed annually. However, the survey distance has varied in length as GDRCo formalized the survey and as the river changes. Each spring, in conjunction with the receding limb of the hydrograph, spot checks were performed at a known breeding site downstream of the survey reach to determine the onset of breeding, in an attempt to capture the peak of the breeding season. A visual encounter survey method was employed during a one-day survey in which surveyors walked the cobble/gravel bars in a downstream direction searching for egg masses. When surveyors encountered egg masses, they recorded which bank of the river they were on (right bank vs. left bank, looking downstream), GPS coordinates of egg masses, species code, number of egg masses in a given area and egg development stage. Egg development stage also accounts for egg condition based on whether or not the egg masses are stranded or desiccated. Start time, end time, start location, end location, weather conditions, air temperature and water temperature were recorded, as well. GDRCo will continue these surveys annually through the life of the permit. Results will be provided in the Annual Status Report (ASR).	ITP Condition # 6.4	Annually	Permittee	
19	In addition, GDRCo will survey approximately 50 miles of stream during the first two weeks of 2018, to assess FYLF breeding habitat across their property. The results of this survey will also be included in the 2019 ASR.	ITP Condition # 6.4	2018	Permittee	
20	No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist(s) shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of 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 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 Covered Activities on the Covered Species; and (8) any other pertinent information.	ITP Condition # 6.7	Within two months of the permit expiration date.	Permittee	
21	CDFW accepts the Final Mitigation Report as complete.	ITP Condition # 6.7	Within one months of the permit expiration date.	CDFW	

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
CALIFORNIA ENDANGERED SPECIES ACT
INCIDENTAL TAKE PERMIT
NO. 2081-2018-026-R1

Green Diamond Resource Company
Foothill Yellow-Legged Frog Incidental Take Permit

CEQA FINDINGS

INTRODUCTION:

The California Department of Fish and Wildlife (CDFW) has prepared these findings to document its compliance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 *et seq.*). CDFW is a responsible agency under CEQA with respect to the Foothill Yellow-Legged Frog Incidental Take Permit (Project) because of its permitting authority under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.). (See generally Pub. Resources Code, §§ 21002.1, subd. (d), 21069; CEQA Guidelines, § 15381; see also Cal. Code Regs., tit. 14, § 783.3, subd. (a).)[1] CDFW makes these findings under CEQA as part of its discretionary decision to authorize Green Diamond Resource Company (Permittee) to incidentally take Foothill Yellow-Legged Frog (*Rana boylii*) (Covered Species) during implementation of the Project. (See generally Fish & G. Code, § 2081, subd. (b); Cal. Code Regs., tit. 14, § 783.4.) The Foothill Yellow-Legged Frog are designated as a candidate species under CESA.

CDFW is a responsible agency under CEQA with respect to the Project. (See generally Pub. Resources Code, § 21067; CEQA Guidelines, § 15367.) CDFW analyzed the environmental impacts associated with implementation of the Project in a Mitigated Negative Declaration and Initial Study and approved the Project on [date of approval]. In so doing, CDFW imposed various mitigation measures for impacts to the Covered Species as conditions of Project approval and concluded that Project-related impacts to the Covered Species could be substantially lessened with implementation of mitigation and avoidance measures, such that the impacts would be less than significant.

As approved by CDFW, the Project involves activities associated with timber harvesting. The Project site is within the range of the Covered Species and is known to support individuals of the species. The project will result in no permanent loss of habitat for the Covered Species, though take of the Covered Species as defined by Fish and Game Code is expected. (Fish & G. Code, § 86.) These impacts fall within CDFW's permitting jurisdiction under CESA. (*Id.*, §§ 2080, 2081, subd. (b).)

[1] The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with Section 15000.

FINDINGS:

CDFW finds that the mitigation measures imposed as conditions of Project approval by CDFW, along with the mitigation measures and Conditions of Approval set forth in CDFW's ITP for the Project, will ensure that all Project-related impacts on the Covered Species are mitigated to below a level of significance under CEQA.

CDFW finds that issuance of the 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, as well as adherence to and implementation of the Conditions of Approval imposed by CDFW through the issuance of the ITP, will avoid or reduce such potential effects to below a level of significance.

The following measures and others set forth in CDFW's ITP for the Project will avoid to the extent feasible and mitigate to below a level of significance all Project-related impacts on the Covered Species:

7.1 Class I watercourse crossings:

7.1.1 Prior to a Class I watercourse crossing installation or removal, a qualified biologist or qualified designee (knowledgeable with all life stages of FYLF and similar species) shall examine the work area (defined as the area where equipment operations will occur) and watercourse 100 feet upstream and downstream of the work area (collectively defined as the project area), to determine the presence of any life stage of FYLF.

7.1.2 Visual encounter surveys shall consist of walking the project area and visually scanning in the water and on streambanks. A minimum of three passes shall occur to ensure depletion. Additional passes shall be required if the FYLF occur on the third pass.

7.1.3 If FYLF egg masses are located within the project area, a qualified biologist shall move the egg masses out of the project area provided a suitable location upstream or downstream of the work site can be located. If a suitable location is not found, the egg masses shall be temporarily held upstream of the project area and returned upon completion of the project; or operations shall not commence until after the eggs within the project area have hatched and the tadpoles are relocated out of harm's way.

7.1.4 If FYLF tadpoles are found during the survey, a qualified biologist shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project

area. If FYLF juveniles or adults are found during the survey, a qualified biologist or individual shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area.

7.1.5 Block nets, with less than ¼-inch mesh, shall be installed upstream and downstream of the project area to prevent migration into the work area. The top end of the block net shall be folded over to prevent juveniles and adult FYLFs climbing over the net into the project area. The nets shall extend perpendicular to at least 10 feet into wetted channel and 10 feet onto the bank, where feasible, to prevent tadpoles, juveniles and adults from migrating into the work area.

7.1.6 If the project requires more than one day to complete and FYLF were found on the first day of construction, measures 7.1.2, 7.1.3, 7.1.4 and 7.1.5 shall be implemented prior to each of the following day's construction activities.

7.2 Class II watercourse crossings:

7.2.1 During annual AHCP and THP road assessment surveys designed to identify potential road sites planned for upgrading, decommissioning or other in-channel maintenance activities, AHCP Roads Department staff and/or RPFs shall identify and document for subsequent survey(s) for Class II watercourse crossings that have potential foothill FYLF or presence of FYLFs.

7.2.2 AHCP Roads Department staff and RPFs that perform road assessments shall be trained annually by a qualified GDRCo biologist to identify FYLFs and their habitat. Their assessments shall follow GDRCo's FYLF Road Point Checklist (see Attachment C).

7.2.3 Staff performing these road assessments shall be annually trained by a qualified GDRCo biologist to identify Class II watercourses having potential FYLF habitat and FYLF.

7.2.4 Prior to operational activities associated with road decommissioning, upgrading, or other in-channel maintenance activities, a qualified biologist shall field inspect the sites identified by trained AHCP Roads Department staff and/or RPFs to confirm whether potential FYLF habitat is present.

7.2.5 If habitat for FYLF is confirmed, the work area (defined as the area where equipment operations will occur) and 100 feet upstream and 100 feet downstream of the work area (collectively defined as the project area) will be examined prior to any upgrading, decommissioning or other in-channel maintenance activities.

7.2.6 Visual encounter surveys shall consist of walking the project area and visually scanning in the water and on streambanks.

7.2.7 If FYLF egg masses are located within the project area, a qualified biologist shall move the egg masses out of the project area provided a suitable location upstream or downstream of the work site can be located. If a suitable location is not found, the egg masses shall be temporarily held upstream of the project area and returned upon completion of the project; or operations shall not commence until after the eggs within the project area have hatched and the tadpoles are relocated out of harm's way.

7.2.8 If FYLF tadpoles are found during the survey, a qualified biologist shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. If FYLF juveniles or adults are found during the survey, a qualified biologist or individual shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area.

7.2.9 Block nets, with less than ¼-inch mesh, shall be installed upstream and downstream of the project area to prevent migration into the work area. The top end of the block net shall be folded over to prevent juveniles and adult FYLFs climbing over the net into the project area. The nets shall extend perpendicular to at least 10 feet into wetted channel and 10 feet onto the bank, where feasible, to prevent tadpoles, juveniles and adults from migrating into the work area.

7.2.10 If the project requires more than one day to complete and FYLF were found on the first day of construction, measures 7.2.6, 7.2.7, 7.2.8, and 7.2.9 shall be implemented prior to each of the following day's construction activities.

7.3 Water Drafting: All water drafting activities will be conducted according to the requirements of the MATO. If infiltration galleries are constructed, they shall not be removed at the end of the season, to avoid impacts to FYLF using the sites.

7.4 Log Hauling: Log hauling shall not occur on roads in the Riparian Management Zone (RMZ)/Watercourse Lake and Protection Zone during the winter period where saturated soil conditions exist which results in ponded water present on the running surface of roads (small puddles or water filled potholes do not constitute ponded water), unless a visual encounter survey for juvenile and adult FYLF by a qualified individual has occurred one day prior to

log hauling on such roads. This protection measure does not restrict routine road maintenance activities as otherwise allowed for in THPs.

7.5 Timber Falling: In Class I watercourses and Class II watercourses with free water present, all trees shall be felled away from the watercourse. In Class III watercourses with free water present, all trees shall be felled away from the watercourse, where feasible.

7.6 Instream Restoration Projects:

7.6.1 Prior to the start of any instream restoration project, a qualified biologist or qualified designee (knowledgeable with all life stages of FYLF and similar species) shall examine the work site(s) to determine the presence of any life stage of FYLF within the work area (defined as the area where equipment operations will occur) and 100 feet upstream and 100 feet downstream (collectively defined as the project area).

7.6.2 Visual encounter surveys shall consist of walking the project area and visually scanning in the water and on streambanks. A minimum of three passes shall occur to ensure depletion. Additional passes shall be required if the FYLF occur on the third pass.

7.6.3 If FYLF egg masses are located within the project area, a qualified biologist shall move the egg masses out of the project area provided a suitable location upstream or downstream of the work site can be located. If a suitable location is not found, the egg masses shall be temporarily held upstream of the project area and returned upon completion of the project; or operations shall not commence until after the eggs within the project area have hatched and the tadpoles are relocated out of harm's way.

7.6.4 If FYLF tadpoles are found during the survey, a qualified biologist shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area. If FYLF juveniles or adults are found during the survey, a qualified biologist or individual shall relocate them upstream or downstream of the project area or retain them until the project is complete, then release back into the project area.

7.6.5 Block nets, with less than ¼-inch mesh, shall be installed upstream and downstream of the project area to prevent migration into the work area. The top end of the block net shall be folded over to prevent juveniles and adult FYLFs climbing over the net into the project area. The nets shall extend perpendicular to at

least 10 feet into wetted channel and 10 feet onto the bank, where feasible, to prevent tadpoles, juveniles and adults from migrating into the work area.

7.6.6 If the project requires more than one day to complete and FYLF were found on the first day of construction, measures 7.6.2, 7.6.3, 7.6.4, 7.1.4 and 7.6.5 shall be implemented prior to each of the following day's construction activities.

7.7 Invasive Species Avoidance: The *California Department of Fish and Wildlife, Aquatic Invasive Species Disinfection/Decontamination Protocol* (https://nrm.CDFW.ca.gov/FileHandler.ashx?DocumentID=92821) shall be followed and applied to field gear used to collect, relocate and block animals to ensure pathogens and parasites are not inadvertently spread between project sites.

CDFW finds that the Mitigation Monitoring and Reporting Program in Attachment A below will ensure compliance with mitigation measures by requiring the Permittee to monitor and report progress in implementing those measures for review by CDFW staff.

The Mitigation Monitoring and Reporting Program is adopted.

The Project is approved.

DATE: 7/3/2018

By: _____

Neil Manji, Regional Manager
Region 1
DEPARTMENT OF FISH AND WILDLIFE

Attachment A: Mitigation and Monitoring Reporting Program (separate document)

Attachment B: Foothill Yellow-Legged Frog Road Point Checklist

Foothill Yellow-legged Frog Road Point Checklist

*The purpose of this checklist is to aid Green Diamond Resource Company's employees and contractors in the decision making process of identifying typical Foothill Yellow-legged Frog (*Rana boylii*) habitat. We have referenced the following checklist with the current information available to characterize typical Foothill Yellow-legged Frog habitat and will review or refine this checklist with the Department as new information is collected through implementation of the permit.

Breeding and Tadpole Rearing Habitat

- **Water Present**
  - Tadpoles/eggs are usually found in shallow, slow moving water (Fuller and Lind 1992; Fellers 2005). Generally egg masses are between depths of 0 .1m- 0.6m deep (Bondi et al. 2013). After hatching larvae stay in the water where development typically takes 3-4 months depending on temperature (Fellers 2005).
- **Open to Partial Canopy**
  - *Generally*, breeding areas have an open to partial-open canopy with sunlight reaching most of the stream (Hayes and Jennings 1988; Welsh and Hodgson 2011). To our knowledge, specific canopy values for RABO breeding and rearing sites have not been documented; however, Hayes and Jennings (1988) state that post-metamorphic or larval RABO in the Sierra Nevada foothills are often found at sites with at least some shading.
- **Cobble/Boulder Dominated Substrates**
  - Breeding and rearing habitat generally consists of stream sections with variable substrates. Although gravels are often present, breeding and rearing habitat is predominated by cobble and boulder (Bondi et al. 2013; Kupferberg 1996; Yarnell 2005). RABO typically attach their egg masses to the downstream side of these substrates (Kupferberg 1996). Once hatched the tadpoles will seek shelter and forage in the interstitial spacing provided by these substrates (Ashton et al. 1998).
- **Gravel/Cobble Bar Present**
  - Often times gravel/cobble bars are associated with oviposition sites due to the creation of slackwater areas, appropriate substrate size, and low gradient shorelines (Lind et al. 1996; Kupferberg 1996).

- **Slackwater/Backwater pools (areas of slow moving water)**
    - Egg masses and tadpoles tend to be in slower moving areas of water where they remain through metamorphosis. (Lind et al. 1996; Ashton et al. 1998).

Breeding and Tadpole Rearing Timing

- **April-June**
    - Adults are observed congregating near breeding sites during these months (Kupferberg 1996). This is also a time when individuals are moving more than other times of the year. The breeding window is relatively large due to wide range distribution and wide temperature/flow ranges. Throughout the north coast breeding generally occurs from April through June with the peak usually around May (Ashton et al. 1998; Fellers 2005).
- **May-September**
    - Generally, larvae hatch within one month after eggs are deposited (depending on environmental conditions); typically tadpoles spend 3-4 months in the stream before metamorphosis, again this is dependent on environmental conditions (Fellers 2005).

Subadult and Adult (Spring and Summer Habitat)

- **Water Present**
    - RABO are described as being stream or river frogs and are generally found in or near water (Stebbins 1985).
- **Partially open (<90% canopy) to fully open**
    - During spring and summer, subadult and adult RABO can be found basking on exposed substrates (Hayes and Jennings 1988; look at the amount of sunlight hitting the stream as well as looking up to see sky exposure through the canopy). In general, RABO are associated with sites that are partially shaded and are rarely found in areas with >90% shading (Hayes and Jennings 1988). Although there is little data on RABO canopy associations on the north coast, a previous study in the Sierra Nevada foothills showed that subadult and adult RABO were most often associated with streams consisting of shading ranging from 61-80% (Hayes and Jennings 1998).

- **Gravel/Cobble/Boulder Substrates**
    - Although gravels are often present, RABO require habitat that offers refugia when escaping into the water. Cobble and boulder substrates offer interstitial spacing that provide this type of refugia and are important attributes to their habitat (Hayes and Jennings 1988). *Note: if an animal is observed jumping into the water, the observer can usually wait a short amount of time and the animal will resurface.

Subadult and Adult (Winter Habitat November-Feb)

- **Water present**
    - As mentioned previously, RABO are described as being stream or river frogs, generally found near water (Stebbins 1985). Winter months with increased rain, moisture, and higher instream flows may affect activity in this species, which has been observed overwintering in velocity-protected areas of the channel (Van Wagner 1996).
- **Partially open (<90% canopy) to fully open**
    - Winter months on the north coast do not provide basking opportunities on a consistent basis, but this habitat feature is important to look for as a part of overall habitat assessment.
- **Gravel/Cobble/Boulder Substrates**
    - Frogs need places for refuge when escaping into the water; gravel, cobble and boulder substrates are important attributes to their overwintering habitat. During winter months, RABO subadults and adults have been observed using smaller watercourses consisting of pool/riffle habitat and gravel/cobble substrates (M.Kluber, pers. obs.). Additionally, overwintering animals have been observed using root wads, vegetation, woody debris, undercut banks, and boulders for refugia along streams (Van Wagner 1996). *Note: if an animal is observed jumping into the water, the observer can usually wait a short amount of time and the animal will resurface.

Notice of Determination

To:
☒ Office of Planning and Research
For U.S. Mail:
P.O. Box 3044
Sacramento, CA 95812-3044

Street Address:
1400 Tenth Street
Sacramento, CA 95814

From:
California Department of Fish and Wildlife (CDFW)
Region 1
619 Second Street
Contact: Nicholas Simpson
Phone: (707) 445-6512

SUBJECT: ***Filing of Notice of Determination pursuant to Public Resources Code § 21108***
State Clearinghouse Number:_____

Project Title: Green Diamond Resource Company (GDRCo) Foothill Yellow-Legged Frog Incidental Take Permit (California Endangered Species Act Incidental Take Permit No. 2081-2018-026-R1 (ITP))

Project Location: GDRCo presently owns and manages approximately 365,500 acres of private timberlands within Humboldt and Del Norte counties of California

Project Description: GDRCo proposes to conduct forest management and conservation activities on its California timberland ownership for timber production and other purposes pursuant to California's Timberland Productivity Act, the Z'BergNejedly Forest Practice Act, the Board of Forestry's Forest Practice Rules, various other state laws, and GDRCo's internal management documents, policies and guidelines.

The Project will result in temporary impacts to approximately 4.4 acres of Foothill Yellow-Legged Frog (*Rana boylii*) habitat annually. Permanent habitat loss is not expected. The project is expected to result in incidental take Foothill Yellow-Legged Frog, which is designated as a candidate species under the California Endangered Species Act. The ITP referenced above as issued by CDFW authorizes incidental take of species listed under CESA that may occur as a result of Project implementation.

This is to advise that CDFW, acting as [☐ the lead agency / ☒ a responsible agency] approved the above-described project on _____ and made the following determinations regarding the above described project:

1. The project [☐ will / ☒ will not] have a significant effect on the environment (This determination is limited to effects within CDFW's permitting jurisdiction as a responsible agency).
2. [☐ An environmental impact report / ☒ A negative declaration] was prepared by the lead agency for the original project.
3. Additional mitigation measures [☒ were / ☐ were not] made a condition of CDFW's approval of the project.
4. A mitigation reporting or monitoring plan [☒ was / ☐ was not] adopted by CDFW for this project.
5. A Statement of Overriding Considerations [☐ was / ☒ was not] adopted by CDFW for this project.
6. Findings [☐ were / ☒ were not] made by CDFW pursuant to Public Resources Code § 21081(a). CDFW did, however, adopt findings to document its compliance with CEQA.
7. Compliance with the environmental filing fee requirement at Fish and Game Code § 711.4 (check one):
   - ☐ Payment is submitted with this notice.
   - ☒ A copy of a receipt showing prior payment was submitted to CDFW.

☒ Responsible Agency statement: The Mitigated Negative Declaration prepared by the lead agency for the Project is available to the general public at the office location listed above for the lead agency. CDFW's administrative record of proceedings related to the incidental take permit is available to the public for review at CDFW's regional office.

Signature _____ *Date:* 7/17/18

Neil Manji, *Regional Manager*

Date Received for filing at OPR: _____