



May 2011

**Green Diamond Resource Company, California Timberlands Division**  
**Aquatic Habitat Conservation Plan/Candidate Conservation Agreement**

Over the past several decades, Green Diamond Resource Company has taken steps to amass extensive information about our lands in Humboldt and Del Norte counties of Northern California. Our motto is to “know more about our land than anyone else.” In order to effectively and responsibly manage these lands for the long term, we knew we had to learn all we could about these lands and to use that knowledge to strike a balance between protecting valued resources and maintaining a viable, timber products business.

The Federal Government has approved an Aquatic Habitat Conservation Plan and Candidate Conservation Agreement with Assurances (AHCP/CCAA) that reflects specific conditions on our lands. We have used the best science available to develop a plan that we believe is among the finest offered to protect aquatic species. Our unique approach to conservation planning, riparian and upland management, road rehabilitation and management, research and monitoring will result in improved habitat conditions throughout our ownership over the life of this plan.

For fish, we have learned it is primarily fine sediment that has the greatest negative effects and roads are the primary source. This plan focuses on how roads are built, maintained and decommissioned.

This plan contains an ambitious legacy road improvement plan that will accelerate repairs during the first 15 years of the plan. Legacy roads are those present on our lands prior to our ownership or constructed under state requirements that have since been updated and improved to minimize sedimentation. Upgrading these roads will result in water quality improvements early in the life of the plan, thus helping to provide the cool, clear water aquatic species need to thrive. This legacy program and other ongoing road management activities are critical to the short- and long-term effectiveness of this plan.

Green Diamond is recognized as an industry leader in research and natural resource management. What we have learned over the years has shaped this plan, which also includes an aggressive monitoring program to help us carefully monitor conditions and learn what is working and what may need a new

approach. This is a “living” plan, and through a rigorous process of adaptive management, we will incorporate what is learned from ongoing research, on-the-ground experience and new knowledge to enhance habitat and benefit the numerous aquatic species this plan is designed to protect.

**Please read further to learn more about this AHCP/CCAA.**

## **FACT SHEET**

### **Species, Area, and Activities Covered by the Plan**

Green Diamond Resource Company’s California Timberlands Division prepared an *Aquatic Habitat Conservation Plan and Candidate Conservation Agreement with Assurances* to conserve habitat for and mitigate impacts on seven aquatic species:

- Coho salmon
- Steelhead trout
- Chinook salmon
- Coastal cutthroat trout
- Rainbow trout
- Southern torrent salamander
- Tailed frog

The conservation measures of this 50-year plan focus on assessing, conserving, and monitoring the populations and habitats of the species covered under the plan and are designed to be a comprehensive conservation program.

The species included in the plan occupy a wide range of aquatic conditions based on their specific habitat requirements and biological adaptations and are dependent on a variety of stream habitats in the Plan Area.

### **Plan Area**

The current Plan Area covered by the AHCP/CCAA and related permits includes 416,000 acres in Del Norte and Humboldt counties in Northern California and falls within twelve distinctive Hydrographic Planning Areas (HPAs) where Green Diamond owns lands or harvesting rights and has conducted extensive research to gather information about habitat conditions and populations of species covered under the plan.

### **Habitat Conditions**

Information about the status of stream habitats in the Plan Area is based on the results of stream channel and habitat typing assessments, stream monitoring programs, sediment delivery studies and large woody debris (LWD) assessments.

### **Occurrence and Status of Covered Species**

Information about the status and occurrence of Covered Species in the Plan Area is based primarily on the results of ongoing presence/absence fish surveys, data collected on summer populations of juvenile salmonids, trapping of out-migrant smolts, period surveys of spawning salmonids, monitoring of southern torrent salamander populations and monitoring of tailed frog populations.

### **Conservation Goals**

Based on the status of habitats and Covered Species in the Plan Area and HPAs and the potential for activities to affect these species, Green Diamond identified the following goals and objectives for the AHCP/CCAA, each based on the shared habitat requirements of the Covered Species. The goals are to:

1. Maintain cool water temperatures consistent with the requirements of the individual species;
2. Minimize and mitigate human-caused sediment inputs;
3. Provide for the recruitment of large woody debris into streams so as to maintain and allow the development of functional stream habitat conditions; and
4. Monitor and adapt the AHCP/CCAA as new information becomes available for the benefit of the Covered Species.

### **Conservation Measures for Covered Species**

To minimize and mitigate the effects of take on listed Covered Species to the maximum extent practicable and to benefit unlisted Covered Species in an effort to reduce the need to list them under the ESA in the future, Green Diamond will implement an "Operating Conservation Program" with seven components:

1. Riparian Management Measures -- measures will vary among three broad classes of streams.
2. Slope Stability Measures – measures address discrete parts of the landscape with similar physical characteristics and relatively high landslide-related sediment delivery rates.
3. Road Management Measures – measures include a risk assessment of road-related sediment sources, road decommissioning standards, standards for new roads, upgrading of management roads, road maintenance and inspection, limitations of road and landing use, emergency road repair and training.
4. Harvest-related Ground Disturbance Measures – measures cover forest management and harvesting activities.
5. Monitoring Measures – measures are grouped in three categories: implementation monitoring, effectiveness monitoring and experimental watershed programs.
6. Adaptive Management Measures – measures are determined in response to the results of ongoing monitoring or the outcome of a designed experiment in one or more Experimental Watersheds.
7. Responses to Changed and Unforeseen Circumstances – provisions are included in the AHCP/CCAA to respond to changed circumstances such as natural disturbances caused by fire, wind, floods, landslides, earthquakes and pest infestation.

### **Special Habitat Projects**

A special habitat project is included in the AHCP/CCAA: transportation of anadromous salmonids around natural barriers. This project will improve and open up miles of watercourses for salmonid species protected under this plan.

### **Effectiveness of the Plan**

The plan's conservation measures are designed to improve the condition of species covered under the plan and their habitat. These measures include an aggressive road improvement and upgrade plan, measures designed to provide for large woody debris recruitment in streams and special habitat projects. In addition, the plan's monitoring and adaptive management measures will enable Green Diamond to document ongoing conditions and populations of species and can result, as necessary, in the reallocation of resources where they will have the greatest benefit to the species covered under the plan and their habitat. Research in the plan involves new "state of the art" studies that will provide benefits far beyond the scope of the Plan Area.

The combination of these measures provides added assurance that a sufficient level of conservation is being provided to address potential impacts from management activities. In addition, the improvement in conditions that will result from these measures, over and above those needed to meet the "minimize and mitigate" standard applicable to an incidental take permit, will assure the achievement of properly functioning habitat and thereby contribute to the recovery of the species.

Finally, Green Diamond has designed its conservation strategy to assist in the company's requirements to meet other legal mandates – such as protecting water quality in compliance with the state's Water Quality Control Act and mitigating or avoiding all significant environmental impacts of timber harvest under the California Environmental Quality Act.

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