River Bend Productions

Bird Box Movie Filming

Initial Study & Proposed Mitigated Negative Declaration

December 2017

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

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Initial Study & Proposed Mitigated Negative Declaration

for

River Bend Productions

Bird Box Movie Filming

Prepared for:

Lead Agency: California Department of Fish and Wildlife
619 Second Street
Eureka, California 95501

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December 2017

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Acronyms and Abbreviations

APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
BRCSD	Big Rock Community Services District
CEQA	California Environmental Quality Act
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEMA	California Emergency Management Agency
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CH_4	Methane
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CRPR	California Rare Plant Rank
CSD	Community Services District
dB	decibel
dBA	A-Weighted Sound Level
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
GHGs	Greenhouse Gases
L_{eq}	Equivalent continuous sound pressure level
LOS	Level of Service
MT CO_2e	metric tons of carbon dioxide equivalent
N_2O	Nitrous Oxide
NAHC	Native American Heritage Commission
NCAB	North Coast Air Basin
NCRWQCB	North Coast Regional Water Quality Control Board
NCUAQMD	North Coast Unified Air Quality Management District
NWIC	Northwest Information Center
OES	Office of Emergency Services
PM	particulate matter
PRC	Public Resources Code
ROG	reactive organic gases
ROW	Right-of-way
RWQCB	Regional Water Quality Control Board
SCADA	supervisory control and data acquisition
SR	State Route
SRA	State Responsibility Area
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
US 199	United States Highway 199

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1. Project Information

Project Title	Bird Box Movie Filming Project
Lead Agency Name & Address	California Department of Fish and Wildlife Mailing Address: 619 Second Street Eureka, California 95501 Phone number: (707) 445-xxxx Project Director's Physical Address: 619 Second Street Eureka, California 95501
Contact Person	Ms. Cheri Sanville Phone number: (707) 441-5901 Email: cheri.sanville@wildlife.ca.gov
Project Location	Proposed activities would occur at multiple locations in and near the Smith River between Bar-O Ranch (about five miles east/upstream of Gasquet) and Peacock Bar (just west/downstream of Hiouchi).
Project Assessor's Parcel Number (APN)	Various parcels along the Smith River
General Plan Land Use Designation	Varies: Public Facility, None (federal land), Rural Neighborhood, None (State land), Timberland
Zoning	Varies: Public Ownership, Rural Residential, Timberland Preserve, Residential Agricultural
Description of Project	Project activities are directly related to filming of the movie "Bird Box" by River Bend Productions, Inc. Many of the project activities involve a small boat (the plot centers on a boat trip on a river), the core cast of three individuals, stunt doubles, and camera and support crews of up to approximately 250 individuals.

1.1 CEQA Requirements

This project is subject to the requirements of the California Environmental Quality Act (CEQA). The CEQA Lead Agency is the California Department of Fish and Wildlife (CDFW). The purpose of this Initial Study is:

- To provide a basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration or a Negative Declaration
- To disclose potential project environmental impacts
- To inform the CEQA Lead Agency, responsible agencies, trustee agencies, and the public regarding the project and potential environmental impacts

This Initial Study has been prepared to satisfy the requirements of the CEQA, (Public Resources Code (PRC), Div. 13, Sec 21000-21177), and the State of California (State) CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).

1.2 Background

The proposed project is filming of the movie "Bird Box," starring Sandra Bullock and being produced for Netflix. Based on the Josh Malerman novel, the plot is summarized as "a woman and a pair of children are blindfolded and make their way through a post-apocalyptic setting along a river" (IMDb 2017, http://www.imdb.com/title/tt2737304/). Filming of studio-based scenes is currently underway in Los Angeles. The project proponent and applicant is River Bend Productions. The portion of the project covered by the permit and CEQA environmental review process includes the on-river scenes as well as some which involve talent approaching or leaving the boat.

1.3 Description of Project Locations

Proposed activities would occur at multiple locations in and near the Wild and Scenic Smith River between Bar-O Ranch (about five miles east/upstream of Gasquet) and just downstream of Peacock Bar (west/downstream of Hiouchi). Reference Figure 1.1 for the Vicinity Map, Figure 1.2 for the Site Plan, and Figure 1.3 for the ½ mile action area around each project site. Most but not all locations would include in-water work, although only a few would have activities involving potential substrate disturbance. Some locations may be eliminated prior to filming but are included here as a conservative approach to assessing all possible activities covered by permitting.

1.3.1 Bar-O Ranch

Located on Rt. 199 about five miles east of Gasquet, this location is on entirely developed land adjacent to upland. All activity at this site would be limited to the filming of scenes inside and adjacent to existing buildings. There would be no activity in or near the river or riparian corridor.

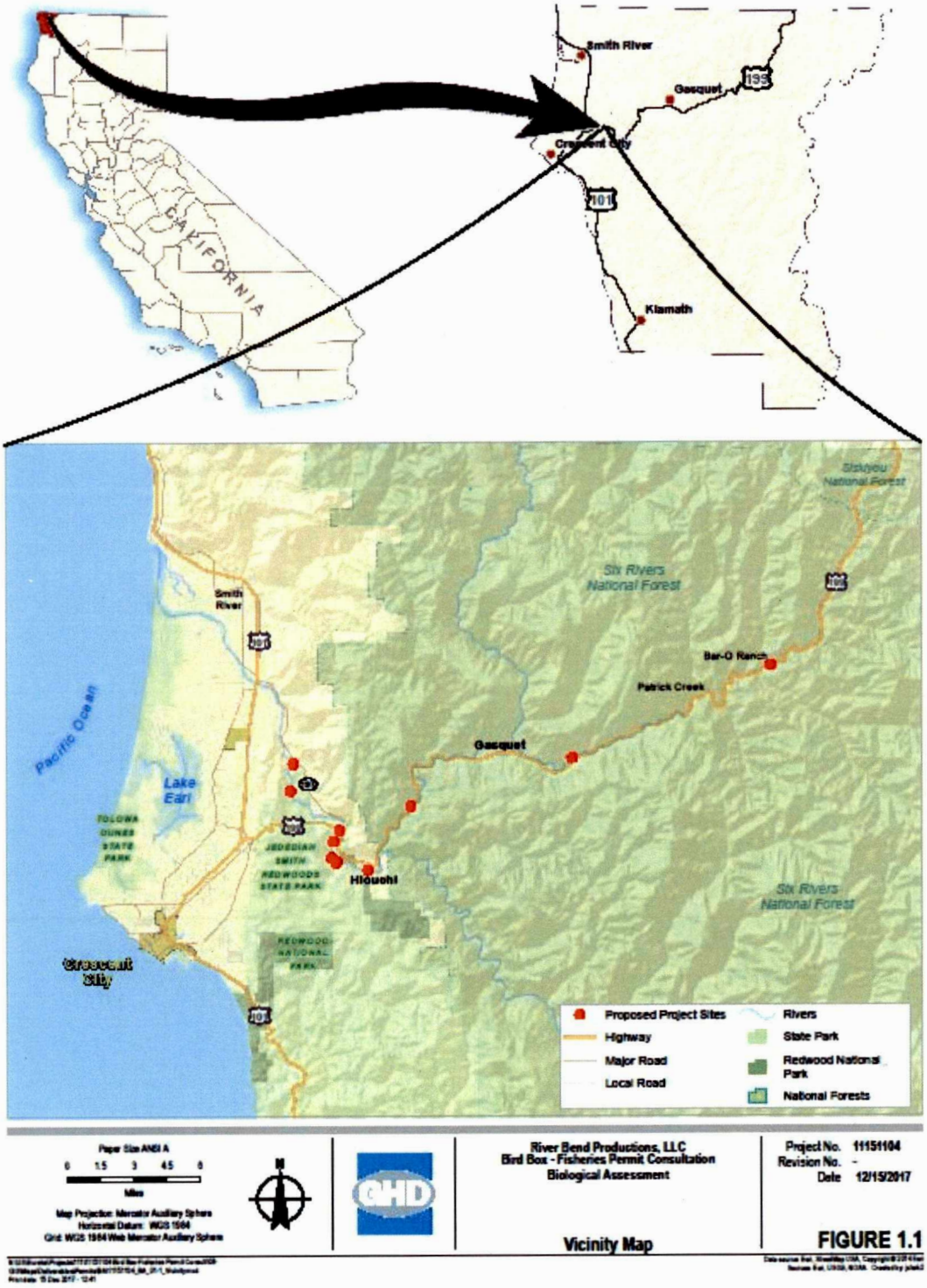
1.3.2 Middle Fork Smith River

This location includes the portion of the Middle Fork of the Smith River between Panther Flat and Hiouchi Forks, with most filming activity at and just below Middle Fork Gorge. Filming would be limited to boat in river scenes only, no substrate disturbance or use of props.

1.3.3 Douglas Park Road Site

This private residence is one of two possible locations for the dock scene.

Figure 1.1 Vicinity Map



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1.3.4 Smith River at Stout Grove/Jedediah Smith Campground at the Summer Bridge Location/Winter Boat Launch

This location includes upland forest at Stout Grove and approximately 500 linear feet of the Smith River and associated sand and gravel bars on both banks:

- Stout Grove including old-growth redwood forest, portions of the Stout Grove and Mill Creek Trails, and the parking lot.
- On the south bank, at the foot of the trail from the Stout Grove parking lot and just downstream of the Mill Creek confluence (but not in any part of Mill Creek); this location includes a sand bar and the adjacent river. Winter filming would occur at this location only if water elevations are seasonally low.
- At the boat launch directly across the river, on a gravel bar on the north bank; used as a staging area and for vehicle and generator parking. With work in the river, these locations will function as one and include the intervening channel. Although now removed for the rainy season, in summer a temporary bridge connects Stout Grove and the boat launch/campground area at this location.

Access from the north is via the campground and onto the river bars; access from the south is via South Bank Road/Douglas Park Road and the Stout Grove parking lot.

1.3.5 Smith River at Jedediah Smith State Park Day Use Beach/Visitor Center Beach

Located on the north bank near the northern end of the campground. Located about 0.25 mile northwest/downstream of the summer bridge, accessed via a path starting near campsite 50 or via a path from the visitor center. This location includes two portions of a gravel bar and about half of the adjacent river channel, each about 400 linear feet. The semi-truck prop would be placed at day use beach if water elevations are seasonally high.

1.3.6 Smith River at Hiouchi Bridge/Society Hole

Located at the northwest corner of the Hiouchi Bridge and on Jedediah Smith State Park land, this gravel bar would be the sunken truck location if water elevations are seasonally low.

1.3.7 Smith River at Jedediah Smith State Park/Peacock Bar

This location is about 1.5 miles NW of Hiouchi and near the downstream limit of proposed activity, with access from SR 197 and unpaved roads just north of SR 199. This location is on State Park property and filming activity would occur along one or two short sections of bank and gravel bar. It is unlikely to be used for filming, but is retained as a potential backup location.

1.3.8 Smith River Residential Area

This location is on private lands about 0.5 miles north (downstream) of Peacock Bar and is centered on 4913 North Bank Road. Access is from SR 197 and private driveways. The site includes a large backwater off the main channel and is protected from high flows by a large rock outcrop.

1.3.9 Base Camp

Base camp would be located at the Redwood RV Park, on US 199 in Hiouchi and located midway between the locations and a short distance north of the Smith River.

1.4 Project Description

All proposed activities are directly related to filming of the movie "Bird Box." Most involve a small boat (the plot centers on a boat trip on a river), the core cast of three individuals, stunt doubles, and camera and support crews of up to about 250 individuals. These may include one to a few individuals in the river in SCUBA gear to set up each shot prior to the filming of each sequence. Some sequences may also include props placed in or near the river, and special effects. These film sequences are described in more detail below, with potential locations identified for each sequence. The Main Unit would film most sequences, with the Second Unit limited to filming boat on river scenes on the Middle Fork of the Smith. The two units would work concurrently.

1.5 Into Boat, Push Away from Shore Scene

This sequence involves talent moving to the shoreline or a small (4x16 foot) floating dock and entering a small boat. The dock would be attached only to the shoreline. There would be one day of setup and one day of filming. The location would be at 4913 North Bank Road or at the Douglas Park Road site and on private land.

1.6 Sunken Truck Scene

Activity for this sequence is expected to last for about two days of setup and two days of filming. The largest prop would be placed in the river at this location. The intent is to place a full size (2007 Peterbilt 379 Ultra Sleeper; 9 ' wide x 11'3" high x 21'10" long) semi-truck cab in the river; the engine, radiator, rear axles, and other internal parts would be removed along with all liquids or fluids and the components thoroughly cleaned in advance and off site. The truck would be lowered by crane and in sections and assembled in place in shallow water, possibly on top of an aluminum platform. Locations with fine silt substrate would be avoided. This scene would require two days of prep time and two days of filming. The Day Use Beach gravel bar near the Jedediah Smith campground is the preferred location if water levels are seasonally high, with Hiouchi Bridge/Society Hole as the backup location in the event that water levels are lower than usual for the season.

Specific activities may include:

- A small boat approaching the truck, with a small trolling motor (type to be determined by water depth. During film sequences the boat would be guided by a cable and not actually steered by the cast members;
- Anchors and guy lines as cable attachment points;
- Construction of metal platforms around the truck and just below the water surface for cast use;
- Possibly, use of bubblers raised above the substrate to create surface water turbulence immediately around the truck during film sequences;
- Possibly, use of a fog machine during some film sequences

1.6.1 Boat Scenes on the River

Multiple scenes would involve filming of talent floating downriver in the small boat. The boat would be guided by a cable attached to two anchors in the river, with guy lines at each end from the anchors to the shoreline. There would be no other props or equipment in the river for these sequences. Multiple locations are being considered within the Middle Fork Smith River between Panther Flat and Forks River Access; most activity is expected to occur at and below Middle Fork Gorge. Mostly filmed by the Second Unit over much of the entire 19-day interval, a camera would be mounted on an overhead cable attached to trees and/or SR 199 guard railings and filming is expected to include about 0.25 to 0.5 mile of the river. The Main Unit would also film one day of boat on river scenes within Jedediah Smith State Park.

1.6.2 Bar-O Ranch Scene

This sequence includes talent walking on a trail and approaching and then entering a building. Except for the brief approach scene, most of this filming would occur indoors. There would be some prepping of the outside of the building to suggest long abandonment, including placement of leaves, small branches, and other natural debris on porches and adjacent to the building. The material would be gathered on-site. Two days of filming are scheduled, currently in mid-project because these are indoor scenes and they could be moved up in the schedule in the event of rain on an earlier filming day. Bar-O Ranch is a Del Norte County facility consisting of developed land and multiple buildings with maintained grounds. All activity at this location would be on uplands or inside buildings.

1.6.3 Crazy Guy in River Scene

Activity for this sequence includes main talent in the boat in mid-river, and an approach by an unidentified adult male individual culminating in a brief fight between the main character and the "crazy man." The sequences would occur both in the river and on an adjacent sand and gravel bar. Activities may include:

- A small boat, with small engine type to be determined by water depth; during film sequences the boat would be guided by a cable as described above and not actually steered by the cast members;
- Anchors and guy lines as cable attachment points;
- Some activity by talent in shallow water, on platforms, or out of the river and on trails adjacent to the gravel bars;
- Access from parking lots to the gravel bars and river via trails and from the campground;
- Staging area on the north bank river bar, including parking of vehicles;
- Possibly and depending on water depth, metal platforms constructed in place and just below the water surface, for cast use and for safety

This sequence would require two days of filming, and would occur within Jedediah Smith State Park (Visitor Center Beach, Day Use Beach, or Peacock Bar).

1.6.4 Stout Grove Ending Scenes

These sequences would be filmed within Stout Grove between the parking lot and the summer bridge location or along portions of the Mill Creek trail. These activities would be mostly on upland and within mature redwood forest, and would involve talent walking on or near trails. Lights may be used for early/late setup and takedown but generally only light modifiers such as reflectors or diffusers would

be used during filming. Small generators may be used to power lights, with cords or cables running from staging areas in parking lots or other suitable locations and following existing trails or with a cable crossing the river from the campground on the opposite bank. The beginning of the scene involves talent exiting the boat and walking up the river bank and into the trees. This brief sequence will likely be filmed elsewhere on the river and not at Stout Grove. There would be one day of preparation and two days of filming. Most activity would be at Stout Grove with the river edge segment at Middle Fork Gorge River Access (high water) or the small beach at Stout Grove (low water).

1.6.5 Schedule and Duration

The tentative schedule, contingent on weather and river levels, is:

January 21-22: Setup

Main Unit

January 23: Filming of into the boat dock sequence

January 24-25: Sunken truck scene filming

January 26: Boat on river scenes

January 27: Rain day if needed

January 29-30: Bar-O Ranch scenes

January 31-February 1: Crazy guy on river scene filming

February 2: Stout Grove ending scenes

February 5-6: Ending scenes (exit from boat), Stout Grove or Middle Fork Gorge

February 7-8: rain days

Second Unit

January 23-Feb 6: Filming of boat on river scenes, Middle Fork Smith River

These is a good possibility that rainfall or high river levels could extend the schedule beyond the allocated rain days. All activity in Stout Grove would be concluded prior to February 15.

1.6.6 List of Equipment

Platforms and related equipment would likely be required at all locations to facilitate filming and safety of the talent, and these would be installed in the river and constructed in place. If platforms are in the pathway of small boat traffic, warning signs would be placed a reasonable distance upstream. Equipment associated with platforms includes:

- 2007 Peterbilt 379 Ultra Sleeper; 9 'wide x 11'3" high x 21'10" long, cab only, no box.
- 4x16 foot floating dock and hardware for temporary bank attachment; constructed from kit and locally purchased no-treated wood.
- Steel platform deck, would be clean of all oils and grease, size 4'x8', 4'x4', 2'x8.'
- Steel and aluminum pipe to support steel deck, assorted sizes.
- Steel and aluminum tread plate tops, sizes 4'x8', 4'x4', 2'x8.'
- Aluminum 12"x12" truss, would be cleaned of all oil and grease, assorted lengths 5', 10', 8', 12', cubes.

- Steel Truss joiners, size 4'x1' with pipe fittings, would be cleaned of all grease and oil.
- 4'x8' ply boards.
- Aluminum pipe and clamp.
- 2"x4", 4"x6", 2"x12" lumber planks.
- Polystyrene cubes 2'&4' thick 4'x8' size, would be covered and sealed.
- Bull pricks.
- Steel shives.
- Tech line rope.
- Multi line rope.
- Steel cable, cleaned.
- CUBE dock or PolyDock products for building floating barges and walk ways.
- Buoyancy compensator device and air tanks for rigging under water.
- Wet suits and SCUBA gear.

As described above, props include a semi-truck (with no engine or fluids) to be placed in the river in sections and assembled in place. Other materials may include sandbags (filled with native sand from the adjacent sandbar) to help hold cables or props in place and to capture sediment.

The boat used throughout the filming would be a small craft with a small electric trolling motor or similar. The boat would be guided by a cable between two anchors on the river bottom and held between guy lines tied off to trees or otherwise securely attached on shore. A Del Norte County Sheriff would be on scene for safety.

A large generator on a tow trailer would be present, along with several smaller generators. Generators are muffled and relatively quiet (55-75 dB at 21 feet). The crane that would lower the truck into the water could be louder, up to 81-90 dB, but would be running only for very short periods of time when the truck is placed and removed and it would be mostly located on paved or unpaved roads depending on selected final location.

Bubblers proposed in the original submittal are not expected to be needed for winter filming, and are retained her as a contingency. In the unlikely event that they are used, they would be placed in the water to create localized surface turbulence. These would consist of perforated PVC pipe or similar attached to platforms to raise them above the bottom sediment. Compressors and hoses would supply air. Bubblers would be placed on coarser sediments away from any redds and tested prior to use to ensure minimal sediment disturbance.

Vehicles are expected to include 25-50 cars or SUVs, 5-10 trailers, and 5-10 stakebed trucks. These would be limited to parking lots, roads, or staging areas; at Jedediah Smith S.P., some staging on the north side of the river may be on gravel bars, but most vehicles would be limited to roads and parking lots. The few vehicles allowed to access gravel bars would follow paths cleared by biological monitors, would be checked in advance to verify no leaks, and if parked would be placed over a liner or pans to ensure no fluids leak into the substrate. Non-essential vehicles would be kept on pavement or at least 100 feet away from standing water.

UAVs (unmanned aerial vehicles) would be used at all locations. Most of this activity would be over the river or gravel bars. If UAVs are used within Stout Grove they will be kept below the main tree canopy.

1.7 Required Permits and/or Approvals

Several additional agencies would also be involved in the consideration of portions of the project. Federal, State and local approvals that may be required for the project include the following:

- Del Norte County – Film Permit and Encroachment Permit
- California Department of Fish and Wildlife – Lake and Streambed Alteration Agreement
- National Marine Fisheries Service – Biological Assessment (informal consultation/concurrence letter)
- U.S. Fish and Wildlife Service – Biological Assessment (informal consultation/concurrence letter)
- U.S. Army Corps of Engineers – Section 404 Permit
- North Coast Regional Water Quality Control Board - 401 Water Quality Certification
- Six Rivers National Forest – Film Permit
- California State Parks – Film Permit

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2. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☒ Hazards & Hazardous Materials	☐ Recreation
☐ Agricultural & Forestry Resources	☐ Hydrology/Water Quality	☐ Transportation/Traffic
☐ Air Quality	☐ Land Use/Planning	☒ Tribal Cultural Resources
☒ Biological Resources	☐ Mineral Resources	☐ Utilities/Service Systems
☒ Cultural Resources	☒ Noise	☒ Mandatory Findings of Significance
☐ Geology/Soils	☐ Population/Housing	
☐ Greenhouse Gas Emissions	☐ Public Services	

DETERMINATION

(To be completed by the Lead Agency) On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CDFW Signature

12/22/17
Date

3. Environmental Analysis

3.1 Aesthetics

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?			✓	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or night-time views in the area?			✓	

a) Adverse Effect on a Scenic Vista – Less than Significant Impact

Project activities would include the use of a small boat, camera equipment, SCUBA gear, anchors and guy lines, platforms, bubblers, fog machine, props, generators, lighting, small crane, and other equipment typically used during filming. Project activities would take place for approximately 19 days not including weather days. Surrounding trees and vegetation provide a visual screen of the project sites from adjacent properties. Therefore, the opportunities for views from vantage points adjacent to the project sites would remain similar to existing conditions, and the impact to scenic vistas would be temporary. The impact is less than significant.

b) Damage Scenic Resources within a State Scenic Highway – No Impact

Based on California Scenic Highway Mapping System information, no designated state scenic highways are found adjacent to or within view of the project area (California Department of Transportation 2011). US 199 for its entire length in Del Norte County has been identified by the State Scenic Highway Mapping System as eligible for State listing. No impact would occur.

c) Degrade Existing Visual Character – Less than Significant Impact

Project activities would result in minor temporary aesthetic impacts that would not substantially alter/degrade the existing visual character of the project area. The project would not permanently degrade the existing visual character, or the visual quality of the project sites and their surroundings because the project sites would be left in their current state after filming. The impact is less than significant.

d) New Source of Light or Glare – Less than Significant Impact

Although filming would primarily be during daylight hours, some setup and takedown may occur before dawn or after dusk (4:00 am to 10:00 pm). Any work lights used before or after daylight hours would be fitted with barn doors or other light control devices to ensure that light is directed where needed and not into treetops or other sensitive habitat. Project activities would be temporary, for approximately 19 days. As a result, the project would not create a new source of substantial light which would adversely affect night-time views.

Considering the nature of filming activities there would be very little, if any, glare resulting from the project. Project-related glare would be from reflective surfaces (e.g., windshields) on equipment. However, these instances of glare would be momentary and passing, depending on sky conditions, and would be blocked by surrounding trees and vegetation. As a result, the project would not create a new source of substantial light or glare. The impact from lighting or glare is less than significant.

3.2 Agriculture and Forest Resources

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				✓

a) Farmland Conversion – No Impact

Maps prepared pursuant to California's Farmland Mapping and Monitoring Program (FMMP) include Del Norte County as an "Area Not Mapped" and, therefore do not categorize the project area as having any type of Important Farmland (California Department of Conservation 2012). The project sites and surrounding area are not in agricultural production, under Williamson Act contract, or zoned for timber production.

The project sites do not include Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on any maps prepared pursuant to the FMMP. The project would not convert FMMP designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use; therefore, no impact would occur.

b, c, d) Conflict with Existing Zoning for Agricultural Use or Forest Land or Result in the Loss of Forest Land – No Impact

Project activities would not conflict with agricultural or forest land zoning or Williamson Act contracts, and would not result in the loss of forest land; therefore, no impact would occur.

e) Convert Forest Land or Farmland – No Impact

No agricultural land exists at the project sites; therefore, there would be no farmland conversion associated with the project. There are trees and vegetation surrounding the project sites in all directions; however, the project would not result in the removal of any trees or vegetation. Some localized trampling of herbaceous vegetation may occur; however, as a contingency, if any vegetation is severely trampled or damaged by crew, it would be replanted by qualified staff or nursery using native species grown from local (generally, within 30 miles) stock. No impact would occur.

3.3 Air Quality

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			✓	
c) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			✓	
d) Expose sensitive receptors to substantial pollutant concentrations?			✓	
e) Create objectionable odors affecting a substantial number of people?			✓	

a) Conflict with or Obstruct Applicable Air Quality Plan – Less than Significant Impact

This impact relates to consistency with an adopted attainment plan. The North Coast Unified Air Quality Management District (NCUAQMD) is responsible for monitoring and enforcing local, state, and federal air quality standards. The U.S Environmental Protection Agency (EPA) sets the National Ambient Air Quality Standards for the following six 'criteria' air pollutants: ozone, particulate matter (PM10 and PM2.5), nitrogen dioxide, carbon monoxide, lead, and sulfur dioxide. The California Air Resources Board (CARB) administers the California Ambient Air Quality Standards, which include the six criteria pollutants listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride.

All areas within the North Coast Air Basin (NCAB) are designated 'attainment' for all National Ambient Air Quality Standards. With regard to the California Ambient Air Quality Standards, all areas within the NCAB except Humboldt and Mendocino counties are designated attainment for all pollutants. Humboldt and Mendocino County are designated nonattainment of the state PM10 standard. To address non-attainment for PM10, the NCUAQMD adopted a Particulate Matter Attainment Plan in 1995. This plan presents available information about the nature and causes of PM10 standard exceedances and identifies cost-effective control measures to reduce PM10 emissions to levels necessary to meet California Ambient Air Quality Standards.

To address non-attainment for PM_{10}, the NCUAQMD adopted a Particulate Matter Attainment Plan in 1995. While this plan is not required for the NCUAQMD to come into attainment with the State PM_{10} standard, it presents available information about the nature and causes of PM_{10}, standard exceedances, and identifies cost-effective control actions to reduce PM_{10} emissions to levels necessary to meet California Ambient Air Quality Standards. However, according to the NCUAQMD's website, the NCUAQMD is planning to update the document at some point in the future.

The project would not include grading, trenching, or other earthwork or earth-disturbing activities that would generate fugitive dust particulate emissions. Project vehicle and equipment emissions would include a minor amount of exhaust PM10 (See impact b & c, below). While the NCAB is in non-attainment for PM_{10}, the temporary nature and scope of project activities would not generate significant impacts.

In the long term, the project would not substantially add to the level of PM_{10} or other emissions such that it would cause a cumulatively considerable net increase of pollutant emissions in the area because the project would only occur for an approximately 19 days. The project would not conflict with or obstruct implementation of the NCUAQMD particulate matter attainment plan because the project would not generate substantial amounts of PM10. Therefore, a less than significant impact would occur.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

This impact is related to localized criteria pollutant impacts. Potential localized impacts would be exceedances of State or federal standards for PM10. Generally, localized PM10 is of concern during construction because of the potential to emit fugitive dust during earth-disturbing activities.

In general, the most substantial air pollutant emissions from development projects would be dust generated from site grading. If uncontrolled, these emissions could lead to both health and nuisance impacts. Construction activities would also temporarily create emissions of equipment exhaust and other air contaminants. The project's potential impacts from equipment exhaust are assessed separately in Section 3.3 c), below.

The project would not include any earth-disturbing activities or other substantial source of fugitive dust. However, the Project's construction activities do not include mass grading, earthmoving, or other dust-generating activities. Therefore, the project's potential to generate a localized PM10 impact is less than significant.

The project would not increase the population or bring new, permanent employees to the project area. As such, the project would not result in substantial long-term operational emissions of criteria air pollutants. Therefore, project-generated operational emissions would not violate or contribute substantially to an existing or projected air quality violation. The project's impact would be less than significant.

c) Result in a Cumulatively Considerable Net Increase of any Criteria Pollutant for which the Region is in Non-Attainment – Less than Significant Impact

This impact is related to regional criteria pollutant impacts. As identified in Section 3.3 a), Del Norte County is designated attainment of all state and federal ambient air quality standards. As discussed in Section 3.3 a), the NCAB is currently designated as a State non-attainment area for PM_{10}, but does not violate other federal, State, or local air quality standards (CARB 2017, EPA 2017). However, Del Norte County is designated as attainment (or unclassified) for all California

and national ambient air quality standards (CARB 2017, EPA 2017). Therefore, the non-attainment pollutants of concern for this impact is PM10. Impact b), above, analyzed the project's potential for PM10 impacts from fugitive dust, and found the project would result in a less than significant impact.

The short and temporary nature of the project is similar to a construction phase. For construction emissions, the NCUAQMD has indicated that emissions are not considered regionally significant for projects whose construction would be of relatively short duration, lasting less than one year. For project construction lasting more than one year or that involves above average construction intensity in volume of equipment or area disturbed, construction emissions may be compared to the stationary source thresholds. The proposed project would result in 19 days of activity for filming. Therefore, the project's duration does not exceed the NCUAQMD's unofficial screening guidance of 1 year. However, emissions modeling was conducted, as detailed below.

The NCUAQMD does not have established CEQA significance criteria to determine the significance of impacts that would result from projects such as the proposed project; however, the NCUAQMD does have criteria pollutant significance thresholds for new or modified stationary source projects proposed within the NCUAQMD's jurisdiction. NCUAQMD has indicated that it is appropriate for lead agencies to compare proposed construction emissions that last more than one year to its stationary source significance thresholds, which are:

- Nitrogen oxides – 40.0 tons per year, 50.0 pounds (lbs) per day
- Reactive organic gases – 40.0 tons per year, 50.0 lbs per day
- PM10 – 15.0 tons per year, 80.0 lbs per day
- Carbon monoxide – 100 tons per year, 500.0 lbs per day

If an individual project's emission of a particular criteria pollutant is within the thresholds outlined above, the project's effects concerning that pollutant are considered to be less than significant.

The California Emissions Estimator Model (CalEEMod) version 2016.3.2 was used to estimate air pollutant emissions from project construction (Appendix A). Project activity is anticipated to begin in January 2018 with and be complete within approximately 19 working days. The emissions modelling included 50 worker vehicles (4 trips each per day), 10 'vendor' vehicles (4 trips each per day), and 10 haul trucks (2 trips each total). The haul trucks would be driven from LA. Therefore, the total trip length of the haul trips was measured from the edge of the NCUAQMD's jurisdiction and is assumed to be approximately 175 miles per trip. Equipment assumptions for the truck scene set-up and take-down included operation of 1 crane, 1 forklift, and 1 tractor/loader/backhoe. Finally, it was assumed than 1 large generator and 5 small generators would operate for 6 hours each over the duration of filming.

Table 3.3-1 and Table 3.3-2 summarize the Project's annual and daily emissions, respectively. As shown in Table 3.3-1, the project's construction emissions would not exceed the NCUAQMD's stationary sources emission thresholds. Therefore, the project would have a less than significant impact.

Table 3.3-1 Project Air Pollutant Emissions (Annual)

Parameter	Emissions (tons per year)			
	ROG	NO_x	CO	PM_{10}
Project 2018 Emissions	<0.1	0.3	0.4	<0.1
NCUAQMD Stationary Source Thresholds	40.0	40.0	100	15.0
Significant Impact?	*No*	*No*	*No*	*No*

Table 3.3-2 Project Air Pollutant Emissions (Daily)

Parameter	Emissions (pounds per day)			
	ROG	NO_x	CO	PM_{10}
Project 2018 Emissions	6.6	43.8	50.3	4.8
NCUAQMD Stationary Source Thresholds	50.0	50.0	500.0	80.0
Significant Impact?	*No*	*No*	*No*	*No*

The project would not increase the population or bring new, permanent employees to the project area. As such, the project would not result in substantial long-term operational emissions of criteria air pollutants. Therefore, project-generated operational emissions would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment. The project's impact would be less than significant.

d) Expose Sensitive Receptors to Substantial Pollutant Concentrations – Less than Significant Impact

Activities occurring near sensitive receptors should receive a higher level of preventative planning. Sensitive receptors include school-aged children (schools, daycare, playgrounds), the elderly (retirement community, nursing homes), the infirm (medical facilities/offices), and those who exercise outdoors regularly (public and private exercise facilities, parks). The closest sensitive receptors near the project sites include residences near the communities of Hiouchi and Gasquet, and private residences in various locations near the Smith River and along US 199. The closest residence near the Stout Grove Summer Bridge, for example, is approximately 1,600 feet to the east.

The project would create temporary emissions of toxic air contaminants, primarily as a component of diesel emissions. The generation of toxic air contaminant emissions in most cases would be temporary, particularly considering the short amount of time such equipment is typically within an influential distance of sensitive receptors. Moreover, the current methodological protocols required by Office of Environmental Health Hazard Assessment (OEHHA) and CARB when studying the health risk posed by diesel PM assume the following: (1) 24-hour constant exposure; (2) 350 days a year; (3) for a continuous period lasting 9, 30, and 70 years (OEHHA 2015). These are incredibly conservative assumptions that are not replicated in reality. Most people are indoors for 18-20 hours a day (at their place of employment or home). Therefore, considering the dispersion of the emissions and the short time frame, exposure to diesel particulate matter is anticipated to be less than significant.

e) Create Objectionable Odors – Less than Significant Impact

Minor odors from the use of equipment during project activities would be intermittent, temporary, and would dissipate rapidly from the source with an increase in distance. The impact would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			✓	
c) c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			✓	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			✓	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

a, b) Impacts to Special-Status Species, Riparian or Sensitive Natural Community – Less than Significant Impact

Based on guidelines established by the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS), a project could be considered to have a significant adverse impact on biological resources if it would result in substantial disruption to, or destruction of, any special-status species, its habitat, or breeding grounds. Special-status species are those that are candidates, proposed, or listed as threatened or endangered by the USFWS or the CDFW, plants that are considered sensitive species by the California Native Plant Society (CNPS)

California Rare Plant Rank (CRPR), or wildlife that are considered species of special concern by the CDFW. A project would also be considered to have a significant impact if it would result in a substantial loss of important plant or animal species; would cause a change in species composition, abundance, or diversity beyond that of normal variability; would result in the direct or indirect measurable degradation of sensitive habitats; or would result in loss of a significant plant community.

The project sites are described in Section 1.3 above and the scenes for filming are described in Section 1.4.

The project site includes areas of high quality natural habitat including the Smith River and bordering conifer forest. Sensitive species, riparian habitat, and other sensitive habitats are known to be present within and near the project site.

A database search of the CDFW CNDDB (California Natural Diversity Database) and USFWS Information for Planning and Conservation (IPaC) was conducted by GHD on September 18, 2017 for the Bird Box project sites. The search encompassed the two U.S. Geological Survey (USGS) quadrangle project site quads (Hiouchi and Shelly Creek Ridge). The project sites in Hiouchi would involve the outdoor filming and in-water work while the Shelly Creek Ridge would likely only involve indoor filming activities (at the Bar-O Ranch; Del Norte County Probation Department property) or boat on river sequences (Panther Flat) with no other in-water props. However, CNDDB and IPaC data was compiled for those areas as well. Based on these database results, as well as personal knowledge regarding the habitat and conditions surrounding the project sites, the information below was compiled to summarize special-status State or federal plant and wildlife species that could be present at the project sites. The presence of coastal redwood forest, riparian forest, and riverine habitat at or directly adjacent to the project sites makes these locations prime habitat for numerous special-status species. A few of the species below may occur within the project site, while most are expected to be present in nearby small tributary streams or other habitat types but not normally in the Smith River or on gravel bars which constitute most of the potential impact area. A few are wide-ranging or mobile species which may periodically move through the project area.

Summary of Sensitive Species That Are Likely to Occur On or Adjacent to the Project Sites

Birds

Northern Spotted Owl (*Strix occidentalis caurina*, ESA Threatened, CESA Threatened) – Known to occur directly adjacent to the project area (most recent record in vicinity from eBird, 2013). Old growth forest contiguous with portions of the project area especially in Jedediah Smith State Park (serves as prime habitat for the species).

Marbled Murrelet (*Brachyramphus marmoratus*, ESA Threatened, CESA Endangered) - Known to occur in and directly adjacent to the project area (most recent record in vicinity from eBird, 2017). Old growth forest contiguous with portions of the project area especially in Jedediah Smith State Park (serves as prime habitat for the species).

Bald Eagle (*Haliaeetus leucocephalus*, CESA Endangered) – Likely to occur along the river, particularly when foraging. Riverine habitat and old growth serve as prime breeding and foraging habitat for this species.

Black Swift (*Cypseloides niger*, CDFW SSC) - Known to occur occasionally in and directly adjacent to the project area (most recent record in vicinity from eBird, 2017). Recent sightings during migration only. Breeding has not been documented in the study area (species requires sea cliffs or permanent

to semi-permanent waterfalls for nesting). However, the study area could serve as foraging habitat for the species.

Fish

Green sturgeon (*Acipenser medirostris*; ESA Threatened, southern DPS only; CDFW SSC) and white sturgeon (*Acipenser transmontanus*; CDFW SSC) – Adult sturgeon not identified to species have been reported in the Smith River near Peacock Bar; spawning has not been reported, and the federally listed southern DPS spapwns only in the upper Sacramento River. Spawning occurs in March to July is not likely to occur for either species during the filming window.

Steelhead (*Oncorhynchus mykiss*; CDFW SSC) – Known to occur in the Smith River, and likely to be present in the mainstem during filming. Two races occur in the basin including summer steelhead and winter-run fish.

Coastal cutthroat trout (*Oncorhynchus clarki*; CDFW SSC) – Known to occur in the Smith River watershed. Due to the various life history strategies of this species (including sea-run anadromous fish and non-migratory individuals), this species could occur in the project area during in-water work.

Coho salmon (*Oncorhynchus kisutch*, ESA Threatened, CESA Threatened) – Known to occur in the Smith River. Mill Creek serves as the primary spawning habitat for coho salmon in the Smith River watershed. Documented presence during early to late fall/early winter (fall-run) although mainstem presence is low in the mainstem in late January;); juveniles are likely present in winter although mostly in off-channel habitat. During winter sampling Parish and Garwood (2015) captured Coho at only 8% of 52 mainstem locations. Coho are not expected to spawn in the lower mainstem (J. Garwood pers. comm.).

Chinook salmon (*Oncorhynchus tshawytscha*, CDFW SSC) – Known to occur in the Smith River (spring and fall runs). The fall run coincides with in-water work and redds are likely to be present in the mainstem in late January (Parish and Garwood 2015, 2016).

Klamath River Lamprey (*Entosphenus similis*; CDFW SSC) - There are no CNDDB records of this species from the project vicinity. Klamath River Lamprey are known to occur in the upper Klamath River, Upper Klamath Lake, lower Klamath, and Trinity River tributaries. Little is known about the species, but ammocoete larvae are assumed to live in backwaters with soft substrates. Cold, clear water is required for spawning and incubation with slow to moderate water velocities. There are no known records of this species from the Smith River, therefore the species is not likely to be present near any of the filming locations

Pacific Lamprey (*Entosphenus tridentatus*; CDFW SSC) - This species is known to occur in the Smith River. Pacific lampreys may have more than one "run" in rivers during the year. They prefer upstream riffle edges in sandy gravel for spawning habitat. Ammocoete larvae live in backwaters with soft substrates. Pacific Lamprey could be present in the project area during filming although no filming will occur in backwater areas and all soft sediment areas will be avoided during filming. If any active redds are located, 50-foot buffers would be established. No activities would occur within these buffer zones.

Reptiles and Amphibians

Northern Red-legged Frog (*Rana aurora*, CDFW SSC) – known from immediate vicinity, dispersing juveniles or adults could occur in most local habitat types although not generally in the

open river. Breeding occurs in isolated wetlands which are not present in the immediate filming locations.

Foothill Yellow-legged Frog (*Rana boylii*, CESA Candidate Threatened) – Known from the immediate vicinity, and presence at low to moderate densities was confirmed at most riverbank locations during GHD site visits on September 21-22 and 27, 2017. Most filming locations are at sandbars and frogs were seen only in areas of riverbank with rocky substrate and typically frogs are present within 50 m of filming locations. Generally limited to river and stream margins and shallow water, in areas with gravel/cobble substrate and slow flow. Can move away from water after rainfall. Breeding occurs in the spring when floodwaters recede (Thompson et al 2016), with egg deposition typically in April on the north coast. Thus breeding occurs well after the filming interval and near a low point in the annual population cycle when adults and surviving juveniles are present. Searches in late September averaged about one juvenile frog per three to five minutes of search effort in good habitat, depending on location; observations of adults were less frequent.

Southern Torrent Salamander (*Rhyacotriton variegatus* CDFW SSC) – Known from immediate vicinity. Generally associated with the splash zone of small high-gradient tributaries, thus not likely to be within filming locations.

Del Norte Salamander (*Plethodon elongatus*, CDFW Watch List) – Common in the immediate vicinity. An upland species generally associated with talus piles and rocky seeps in mature forest. Not likely to be in filming locations, possibly present near some access trails.

Pacific Tailed Frog (*Ascaphus truei*, CDFW SSC) – Known from immediate vicinity. Generally associated with shallows and banks of small, rocky, high-gradient tributary streams. Not likely to be within filming areas but could be nearby.

Western Pond Turtle (*Emys marmorata*, CDFW SSC) - Known occurrences from the Smith River. Found in a variety of water bodies including ponds, lakes, marshes, creeks, rivers, streams, in upland adjacent to water, and irrigation ditches. The species is frequently observed basking on exposed banks, logs, and rocks. Winter activity is possible but limited to unusually warm, sunny days; normally pond turtles are dormant during winter months on the north coast; dormancy typically involved burrowing into loose substrate above the high water mark, thus presence is not anticipated in the shoreline (Thompson et al 2016). Thus, presence is not expected along the shoreline filming activity areas at this time of year.

Mammals

Silver-haired bat (*Lasionycteris noctivagans*, Western Bat Working Group - Medium Priority) – Known from immediate vicinity, could occur in most local habitat types. Foraging and roosting habitat present at the project sites (old growth, coniferous forest near water).

Yuma myotis (*Myotis yumanensis*, Western Bat Working Group – Low to Medium Priority) - Known from immediate vicinity, could occur in most local habitat types. Foraging and roosting habitat present at the project sites (old growth, coniferous forest near water).

Fisher (*Pekania pennant*, CESA Candidate Threatened) – Moderate chance of occurring at or near project sites due to the presence of prime old growth forest habitat.

Sonoma Tree Vole (*Arborimus pomo*, CDFW SSC) – Found in old growth within the coastal fog belt. Rare but could occur in old growth adjacent to river filming locations.

White-footed Vole (*Arborimus albipes*; CDFW SSC) - Extremely rare species with a highly restricted range in California. Most records of the species are from riparian habitats associated with

humid old growth redwood forests (species prefers Red Alder). The only known record of the species from Del Norte county was obtained from intensive trapping efforts at Jedediah Smith State Park in 2014 (record from Cedar Creek). Although no filming will occur within riparian habitat at any of the project sites, the species could potentially be present in the immediate project vicinity at certain filming locations.

Invertebrates

Obscure Bumblebee (*Bombus caliginosus*, CDFW Special Animals List) – Found in the coastal fog belt. Associates with dune nectar plants. Known to occur in the general project area based on CNDDB records.

Western Pearlshell (*Margaritifera falcate*; No special regulatory status but on CDFW Special Animals List) - The Western Pearlshell is an aquatic freshwater mussel. The species has a moderate chance of occurring in the Smith River due the presence of salmonids (egg dispersal requires the presence of salmonids) and relatively cold, clean water. The mussel tends to prefer low velocity water. This being the case, the mussels are more likely to be present in streams and tributaries off the Smith River, such as Mill Creek, or in lower gradient portions of the lower mainstem. The only sighting of this species in the general project vicinity was from the 1950s in Mill Creek (CNDDB). However, prior to the placement of the largest prop (semi-truck) in the river, the area will be inspected for mussels and any mussels will be relocated.

Plants

Methuselah's beard lichen (*Usnea longissimi*, CNPS 4.2) - Limited distribution and moderately threatened). Known to occur in project area based on CNDDB records. Old growth forest at the project site also constitutes suitable habitat for this species.

Ghost-pipe (*Monotropa uniflora,* CNPS 2B.2) - Moderately rare, threatened, or endangered in CA but more common elsewhere). Known to occur in project area based on CNDDB records. Coniferous forest at the project site also constitutes suitable habitat for this species.

Minute pocket moss (*Fissidens pauperculus,* CNPS 1B.2) - Moderately rare, threatened, or endangered in CA and elsewhere). Known to occur in project area based on CNDDB records. Coniferous forest at the project site also constitutes suitable habitat for this species.

Seaside Bittercress (*Cardamine angulate,* CNPS 2B.1) - Seriously rare, threatened, or endangered in CA but more common elsewhere). Known to occur in project area based on CNDDB records. Coniferous forest at the project site also constitutes suitable habitat for this species.

Seacoast Ragwort (*Packera bolanderi var. bolanderi,* CNPS 2B.2) - Moderately rare, threatened, or endangered in CA but more common elsewhere). Known to occur in project area based on CNDDB records. Coniferous forest at the project site also constitutes suitable habitat for this species.

Spiral-spored Gilded-head Pin Lichen (*Calicium adspersum,* CNPS 2B.2) - Moderately rare, threatened, or endangered in CA but more common elsewhere). Known to occur in project area based on CNDDB records. Coniferous forest at the project site also constitutes suitable habitat for this species.

Siskiyou Paintbrush (*Castilleja elata,* CNPS 2B.2) - Moderately rare, threatened, or endangered in CA but more common elsewhere). Known to occur in project area based on CNDDB records. Coniferous forest at the project site also constitutes suitable habitat for this species.

Pacific Gilia (*Gilia capitata ssp. pacifica,* CNPS 1B.2) - Moderately rare, threatened, or endangered in CA and elsewhere). Known to occur in project area (near Slant bridge) based on CNDDB records.

Angel's Hair Lichen (*Ramalina thrausta,* CNPS 2B.1) -Seriously rare, threatened, or endangered in CA but more common elsewhere). Known to occur in project area based on CNDDB records. Coniferous forest at the project site also constitutes suitable habitat for this species.

Del Norte Pyrrocoma (*Pyrrocoma racemosa var. congesta,* CNPS 2B.3) – Somewhat rare, threatened, or endangered in CA but more common elsewhere). Known to occur in project area based on CNDDB records. Lower montane coniferous forest at the project site also constitutes suitable habitat for this species.

Howell's Sandwort (*Sabulina howellii,* CNPS 1B.3) - Somewhat rare, threatened, or endangered in CA and elsewhere). Known to occur in project area based on CNDDB records. Lower montane coniferous forest at the project site also constitutes suitable habitat for this species.

Oregon Goldthread (*Coptis laciniata,* CNPS 4.2) - Moderately threatened and of limited distribution in CA). Known to occur in project area based on CNDDB records. Coniferous forest at the project site also constitutes suitable habitat for this species.

Butte County Morning-glory (*Calystegia atriplicifolia ssp. buttensis,* CNPS 4.2) - Moderately threatened and of limited distribution in CA). Known to occur in project area based on CNDDB records. Lower montane coniferous forest at the project site also constitutes suitable habitat for this species.

Horned Butterwort (*Pinguicula macroceras,* CNPS 2B.2) -Moderately rare, threatened, or endangered in CA but more common elsewhere). Known to occur in project area based on CNDDB records. Habitat on Douglas Park Drive adjacent to Smith River.

Critical Habitat

The project area overlaps critical habitat for the Marbled Murrelet (ESA Threatened) and Coho Salmon (ESA Threatened). There would be no adverse modification of designated critical habitat for any of these species.

Impacts to Sensitive Species or Habitats

Special Status Habitats

A number of sensitive or special status habitats are present within or adjacent to the project area, including the Smith River which is the only large undammed river in California. Area of riparian forest are present, as are old-growth redwood stands and other mixed conifer forests. Much of the area within Jedediah Smith State Park, exclusive of the campground and parking areas, is assumed to be sensitive habitat. Other areas on private lands are developed, and much of the project area within Six Rivers national Forest is second-growth forest with inclusions of more sensitive habitat. Impacts to special status habitat are temporary and brief (a few hours to about three days) and most activities would be limited to paved roads or parking lots or unvegetated portions of gravel bars. Impacts to special status habitats would be either avoided or mitigated as described below.

Special Status Plants

A database search identified several special status plants potentially present in the project area. No sensitive plants are expected to be present in immediate work areas. However a pre-activity botany

survey would flag any sensitive plants if found so that they may be avoided. Funding is being provided to State Parks in the event that any trails or common plants at trail sides require repair or replanting.

- **Mitigation Measure Bio-1: Protection of Sensitive Plant Species**
    - Pre-activity surveys shall be conducted by a qualified botanist with Del Norte County experience at each location to identify any rare or sensitive plants which may be present. River Bend Productions will ensure that impacts to special-status habitats and plant species with CRPR status of list 1A, 1B and 2, shall be avoided by flagging locations or in areas of prolonged activity by placing orange construction exclusion fencing around special status plants.

Implementation of Mitigation Measure BIO-1 would reduce potential impacts to special status habitats and plant species to a less than significant level.

Special Status Aquatic and Semi-aquatic Species

Sensitive species most likely to be present within the work area include salmonids and Foothill Yellow-legged Frogs. Pacific Lamprey could be present, as well as Western Pearlshell Mussel. Western Pond Turtle is also known from the Smith River although winter activity would be likely only on sunny and warmer than normal days in late January.

Pre-activity surveys would be conducted at each in-river location for salmonids including redds, and mussels. It is possible that a platform would be constructed in place to support the truck on the side away from the bank, if this is the case it would help to avoid impacts because it would be constructed by hand and in place, and would maintain a short distance of open water to the channel bed. A platform may or may not be needed depending on slope of the channel bed at the selected location.

Pre-activity surveys would also be conducted for Foothill Yellow-legged Frogs. Because of the film crew preference for smooth sandy banks, it is expected that in most cases frogs would be present near but not within high activity or filming areas, however a somewhat larger area would be surveyed. In such cases the monitor would identify areas where frogs are present and keep foot traffic and equipment away from those areas. If a frog is found within the activity area, if practical it will be allowed to leave the area on its own. If that is not practical, then the frog would be relocated to the nearest suitable habitat downstream. Before entry of a crane or vehicles to a gravel bar, the path would be cleared by the monitor prior to entry.

Impacts to special status reptiles, amphibians, fish, mussels, and other aquatic and semi-aquatic wildlife would be either avoided or mitigated as described below.

The following mitigation is included to reduce potential impacts to adult northern red-legged frogs during project work to a less than significant level.

- **Mitigation Measure Bio-2: Measures to Protect Reptiles, Amphibians, Fish, Mussels, and Other Aquatic and Semi-aquatic Wildlife**
    - Environmental awareness training will be provided to production crew and other on-site staff prior to the start of filming, to include identification and protection of Western pond turtle, foothill yellow-legged frog, northern red-legged frog, salmonids, Western pearlshell, and other aquatic and semi-aquatic wildlife.
    - Salmonid and redd surveys would be done by a SCUBA certified qualified fisheries biologist, with semi-aquatic and terrestrial species covered by a qualified terrestrial

biologist on the riverbank. Surveys would begin in advance of filming and would be conducted weekely between storm events, as well as immediately prior to filming. If any lamprey, Coho, Chinook, or Steelhead redds are identified, they would be mamrked and all prop construction or in-water activities would avoid redds by a minimum of 60 feet per discussion with CDFW and NMFS. Western Pearlshell Mussel would also be avoided or relocated if present. A biological monitor would verify absence of fish prior to lowering of props or materials into the river. For the sunken truck, a fisheries biologist would be in the water prior to lowering (at a safe distance) to insure that no fish are present under or adjacent to the truck before it is allowed to enter the water. A beach seine would be used to clear all fish out of the impact area immediately prior to lowering of the truck.

- When the truck is removed from the river after two to three days, doors would first be opened and an initial in-water inspection performed by the fisheries biologist. As soon as each of the three pieces is lifted clear of the water, the biologist would check to be sure no fish are stranded inside as soon as the truck can be paused safely. A third inspection will be performed as soon as each piece is safely on land.
- A qualified biological monitor experienced with local species would survey each location for foothill yellow-legged frog, northern red-legged frog, and other amphibians or reptiles within one hour prior to the beginning of any setup or filming activity or vehicle or crew access within potential habitat including gravel bars, river shoreline, and vegetated areas. If practical, animals would be allowed to leave the area on their own; if not practical, they would be relocated to the nearest suitable habitat. Biologists will follow standard Amphibian Population Task Force Protocols to prevent spread of chytrid fungus, including decontamination of boots and use of fresh gloves for each animal. The biological monitor would be present during filming activities in the event that any frogs emerge from cover during the day.
- There would be no engine, radiator, oil, gas, or other fluids in the truck used as a prop, and all props would be thoroughly cleaned prior to placement in the stream, All cleaning and all refueling would occur at the staging area, well away from the river or wetlands, and/or over a leak-proof liner to prevent any contaminants from entering the water or sensitive riparian habitat. Only essential vehicles would be allowed on gravel bars and within 100 feet of standing water, and if these are parked they would be placed over liners or pans to protect against leaks onto substrate. Vehicles not essential to filming would remain on paved roads or parking lots or on Caltrans or Del Norte County authorized roadside pull offs.
- Boats or other equipment entering the river will be cleaned per the CDFW Region 1 protocol for decontamination to prevent introduction of invasive species.

Implementation of this mitigation measure would reduce potential impacts to aquatic and semi-aquatic species to a less than significant level.

Marbled Murrelets and Northern Spotted Owls occur in Stout Grove and other areas of mature conifer forest. However all filming activity would occur outside of the nesting season. Filming activities will be scheduled to be completed during daylight hours only. Project activities will comply with the guidance issued by the Arcata Fish and Wildlife Office in July 2006, titled "Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California." Project-noise is assessed further in the Biological Assessment for these species. If UAVs are used within mature forest, they will be limited to daylight hours.

Other sensitive or special status avian species may be present in the area, including Bald Eagle, Osprey, and others. A foraging Osprey was observed during fall location scouts in Jedediah Smith State Park. Nesting periods vary for these species and only a few species (for example Bald Eagle) would be likely to begin nesting prior to the scheduled nd of activity, however disturbance to nests if any will be avoided.

Fisher may occur in mature forest, but would be expected to avoid human presence and there would be no excavations or other activities likely to endanger to this species. Activity is not expected to continue for more than two days in any areas of mature forest and most activity would be on open areas along the river.

Up to 250 people would be present during filming. Only small crews would be present during setup or takedown, and all filming activities would occur during daylight hours. Most human presence would be on trails or on gravel bars along the river. Crews would be limited to about 50 people in areas of the most sensitive habitat. Restricted activity areas would include any off-trail access in Stout Grove and any areas where the biological monitor identifies the presence or likely presence of a sensitive species and determines that excessive activity could pose a reasonable risk.

The following mitigation measure is included to reduce potential impacts to nesting/migratory bird species to a less than significant level.

- **Mitigation Measure Bio-3: Conservation Measures to Protect Nesting/ Migratory Bird Species and Mammal Species**
    - If possible, all activity would occur outside of the nesting season. For most species in Del Norte County, nesting season is defined as March 15 to August 15. Marbled Murrelet and Northern Spotted Owl could show nesting behavior as early as February 15, and Bald Eagle as early as January 15.
    - If work must be completed during the nesting season for any native avian species, a qualified biologist would conduct pre-activity surveys of all potential disturbance areas to verify absence of nesting migratory birds in the project area prior to setup. These surveys would be conducted within two weeks prior to the start of project work. If nesting migratory birds are found in the project work area during pre-activity surveys, they would be avoided with an appropriate buffer area until the young birds have fledged. If state listed (CESA), federally listed (ESA), or raptors are found outside of the project work area (disturbance) but near the area, appropriate buffers (100 to 500 feet) will be implemented after consulting with CDFW. If non-listed state (CESA), non-listed federal (ESA), including state species of special concern are found near, but outside the project work area, smaller buffers (30 to 100 feet) will be implemented after consulting with CDFW.
    - A biological monitor will be present during UAV use to monitor for Marbled Murrelets and Northern Spotted Owls and other native avian species. If changes in normal Marbled Murrelet or Northern Spotted Owl or other sensitive species behavior is observed as a result of UAV use (i.e. visible harassment), UAV use will cease until the bird moves out of the area.
    - Any lights used during pre-dawn or post-dusk setup or takedown will be shielded to prevent bright light from penetrating the tree canopy. Trash will be bagged and removed from the site and properly disposed of at the close of each workday to avoid attracting ravens, crows, or other potential predators. Project activities will comply with the guidance issued by the Arcata Fish and Wildlife Office in July 2006, titled "Estimating the

Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California."

- To avoid impacts to fisher and any other sensitive mammals, no open excavations or other features likely to trap small animals would be allowed. Prior to early morning first movement of any vehicles or equipment left overnight in or near the qwork areas, the operator or a biologist shall walk around the vehicle and check underneath.

Implementation of Mitigation Measures Bio-1, Bio-2 and Bio-3 would result in less than significant impacts to sensitive/special status plant species, sensitive habitat, sensitive aquatic and semi-aquatic species, and nesting/migratory birds.

c) Impacts to Wetlands – Less Than Significant Impact

The project would have only very small and temporary direct effects on federally protected wetlands or waters of the United States as defined by the U.S. Army Corp of Engineers (USACE) and per Section 404 of the Clean Water Act (including, but not limited to, swamps, marshes, bogs, vernal pool habitat, streams, etc.) because project activities would not last for more than a few days in any location, and total temporary fill would not exceed 0.014 acres in the river. Temporary fill would include a truck placed in the river as a prop (about 89.5 cubic yards), a floating dock (3.2 cubic yards), possibly several steel platforms (36 cubic yards), and anchors used to hold cables to guide boats within the river (4.0 cubic yards). Individual props and equipment would be in place for one to three days and removed immediately upon completion of filming activity at each location. The in-water work in the Smith River would avoid fine silt substrate; site visits have confirmed that substrate at potential filming locations along the Smith River would be on sand, gravel, or cobble. No permanent impact would occur. The channel bed would not be altered and would be returned to pre-project condition with the removal of props.

d) Interfere with Movement of Fish or Wildlife Species – Less Than Significant Impact

Implementation of the proposed project would not interfere with the movement of any native resident or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Filming would take place along and in the Smith River in a number of locations; props would be temporarily placed in the river at up to three locations however only one of these (the truck) would partially block any portion of the river and it would be at or near one bank and only 21 feet long within a channel that is several hundred feet wide and thus easily circumvented by fish or other aquatic or semi-aquatic wildlife. Props would be in place for only one to three days depending on location. Given the small size and short duration, no aspect of project activities would significantly impede the movement of fish in the river or any animals along the riparian corridor of the river.

Numerous species of animals, birds, and reptiles inhabit the project area, and the proposed project would not interfere with the movement of these species. There would be no permanent above ground barriers to movement associated with the project for any of the film locations on land. No impact would occur.

e) Conflict with Local Policies or Ordinances – No Impact

Del Norte County does not have any kind of policies or ordinances protecting biological resources that are applicable to the proposed project, such as a tree preservation policy or ordinance. Policies

protecting biological resources found in the General Plan are applicable to construction and development projects, not to the temporary filming of motion pictures. No impact would occur.

f) Conflict with Conservation Plan – No Impact

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved conservation plans with which the proposed project would conflict. No impact would occur.

3.5 Cultural Resources

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				✓
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			✓	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓
d) Disturb any human remains, including those interred outside of formal cemeteries?			✓	

a, b) Historical or Archaeological Resources – Less than Significant Impact

A cultural resources records search (NWIC 2015) was conducted for the Big Rock CSD Water Storage Tank Stabilization Project located in Hiouchi approximately 0.3 miles from the intersection of US 199 and Hiouchi Drive in the community of Hiouchi. Review of the records search indicated that there have been two cultural resource studies that covered approximately 75 percent of the project area (Roscoe 1990; Roscoe 1992). The project area contains no recorded archaeological resources. The State Office of Historic Preservation Historic Property Directory (which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places) lists no recorded buildings or structures within or adjacent to the project area. In addition to these inventories, the NWIC base maps show no recorded buildings or structures within the project area.

Project activities do not include excavation or any other kind of earthwork; therefore, the potential for discovering unknown archaeological resources is very low. The impact is less than significant. No impact to historic resources is anticipated.

c) Paleontological or Geological Resources – No Impact

Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata are non-renewable and scarce and are a sensitive resource afforded protection under environmental legislation in California. Under California PRC Section 5097.5, unauthorized disturbance or removal of a fossil locality or remains on public land is a misdemeanour. State law also requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources (PRC Section 30244).

Project activities do not include excavation or any other kind of earthwork; therefore, no impact to unique paleontological or geologic resources would occur.

d) Human Remains – Less than Significant Impact

There are no known cemeteries or burial sites located on the project sites; however, given the long history of human activity in the area, encountering human remains during project activities is possible, although highly unlikely as the project does not include any kind of excavation or earthwork activities. In the unlikely event that River Bend Productions finds human remains during filming they shall adhere to Health and Safety Code Section 7050.5 and notify the county coroner of the remains. If the county coroner determines that the remains are of Native American descent then the coroner would notify the Native American Heritage Commission (NAHC). The NAHC would then notify those persons it believes to be the most likely descended from the deceased for treatment or disposition of the remains or grave goods (PRC Section 5097.98). The impact is less than significant.

3.6 Geology and Soils

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?			✓	
iii) Seismic related ground failure, including liquefaction?				✓
iv) Landslides?			✓	
b) Result in substantial soil erosion or the loss of topsoil?			✓	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on, or off, site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				✓
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓

a, c) Fault Rupture, Seismic Ground Shaking, Liquefaction, or Landslides – Less than Significant Impact

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. This act prohibits the location of structures designed for human occupancy across active faults and regulates construction within fault zones. The project would not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. No impact would occur.

The project sites do not lie within or adjacent to an Alquist-Priolo Earthquake Fault Zone (William A. Bryant and Earl W. Hart 2007) and project activities are temporary, only lasting approximately 19 days; however, the fault activity map of California does identify active or potentially active faults crossing or adjacent to the project sites (Jennings, C.W., and Bryant, W.A. 2010). The project sites are in an active seismic area and subject to seismic ground shaking and landslides, but there is no evidence of active faulting through the project sites and the risk of ground rupture is considered low. Additionally, project activities do not include housing or structures for human occupancy, and filming is temporary, only lasting approximately 19 days. The impact is less than significant.

b) Soil Erosion or the Loss of Topsoil – Less than Significant Impact

Project activities would not result in soil erosion or the loss of topsoil. No prop or equipment installation work would occur within 24 hours of forecast rainfall. In the event of significant (> 0.5 inch) forecast rainfall, any potentially unstable platforms or small props would be removed from the river. No equipment other than boats, platforms, and specified props would enter the river; vehicles would be limited to exposed gravel bars and designated roads, parking lots, bridges, and trails, and would be kept clear of steep banks or other erosion-prone areas. The impact is less than significant.

d) Expansive Soils – No Impact

Expansive soil is defined as soil that expands to a significant degree upon wetting and shrinks upon drying. Generally, expansive soils contain a high percentage of clay. The project does not include any excavation, grading, construction, or any other activities which would be underground and subject to expansive soils creating substantial risks to life or property; therefore, no impact would occur.

e) Septic Tanks – No Impact

The project does not include use of septic or other alternative wastewater disposal systems. Therefore, no impact would result with regard to the capability of soils to adequately support the use of septic tanks or alternative wastewater disposal systems.

3.7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				✓

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation? (Less than Significant)

Climate change refers to change in the Earth's weather patterns including the rise in the Earth's temperature due to an increase in heat-trapping greenhouse gases (GHG) in the atmosphere. Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of GHGs that contribute to global warming or global climate change have a broader, global impact. Global climate change is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the Earth's atmosphere. The principal GHGs contributing to global warming are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and fluorinated compounds. These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but they prevent heat from escaping back out into space. Among the potential implications of global warming are rising sea levels, and adverse impacts to water supply, water quality, agriculture, forestry, and habitats. Like most criteria and toxic air contaminants, much of the GHG production comes from motor vehicles. GHG emissions can be reduced to some degree by improved coordination of land use and transportation planning at the city, county and subregional level, and other measures to reduce automobile use. Energy conservation measures also can contribute to reductions in GHG emissions.

State Guidance

In 2006, the Governor of California signed the Global Warming Solutions Act of 2006 (Assembly Bill 32), committing the State of California to reducing GHG emissions to 1990 levels by 2020. The statute requires the CARB to track emissions through mandatory reporting, determine the 1990 emission levels, set annual emissions limits that will result in meeting the 2020 target, and design and implement regulations and other feasible and cost effective measures to ensure that statewide GHG emissions will be reduced to 1990 levels by 2020

In December 2008, pursuant to Assembly Bill 32 (AB 32), the CARB adopted the Climate Change Scoping Plan (Scoping Plan), which outlined measures to attain the 2020 GHG emissions limit. The Scoping Plan estimated that implementation of identified measures would result in a reduction of emission from various sectors including transportation, energy, forestry, and high global warming potential gas sectors.

In May 2014, CARB approved the First Update to the Climate Change Scoping Plan (Updated Scoping Plan) which describes the progress made to meet the near-term (2020) objectives of AB

32 and defines California's climate change priorities and activities for the next several years (CARB 2014). The Updated Scoping Plan also updated the 2020 emissions limit and business-as-usual emissions for 2020. Finally, the Updated Scoping Plan provides recommendations for establishing a mid-term emissions limit that aligns with the long-term (2050) goals of Executive Order S-3-05. The recommendations cover the energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green building, and cap-and-trade sectors.

The initial Scoping Plan recommended that local governments achieve a 15-percent reduction below 2005 levels by 2020, which aligns with the State's goal of not exceeding 1990 emissions levels by 2020. However, the Updated Scoping Plan does not contain a recommended reduction level or percent for local government's municipal operations. The CARB is moving forward with a second update to the Scoping Plan that would incorporate a year 2030 GHG emissions reduction target. The second update to the Scoping Plan has not been adopted.

Regional Guidance

The NCUAQMD does not have rules, regulations, or thresholds of significance for non-stationary GHG emissions. In 2011, the NCUAQMD adopted Rule 111 - Federal Permitting Requirements for Sources of Greenhouse Gases to establish a threshold above which New Source Review and federal Title V permitting applies and to establish federally enforceable limits on potential to emit GHGs for stationary sources. These are considered requirements for stationary sources, and should not be used as a threshold of significance for non-stationary source projects. For reference, Rule 111 Section D(1)(a) and D(1)(b) have applicability thresholds of 75,000 MT CO_2e per year and 100,000 MT CO_2e per year.

The current Del Norte County General Plan predates modern planning relevant to GHG emissions and global warming. In 2007, the County of Del Norte Board of Supervisors adopted the United States Cool Counties Climate Stabilization Declaration in which the county committed to creating an inventory of government operational GHG emissions; to working closely with local, state, and federal governments to reduce county GHG emissions to 80 percent below current levels by 2050; and to urge Congress and the Administration to enact a multi-sector national program of requirements, market-based limits, and incentives for reducing GHG emissions to 80 percent below current levels by 2050 (County of Del Norte 2007).

Other Air District Guidance

The BAAQMD publishes CEQA Guidelines to assist local jurisdictions and lead agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality. These CEQA Guidelines were updated in 2010 to include new thresholds of significance (2010 Thresholds) adopted by the BAAQMD Governing Board. The BAAQMD's Guidelines were further updated in May 2017.

The 2010 GHG thresholds of significance contain the following operational thresholds:

- Compliance with a Qualified GHG Reduction Strategy; or
- 1,100 MT CO_2e per year; or
- 4.6 MT CO_2e per service population (residents plus employees) per year.

The BAAQMD Guidelines do not provide construction thresholds of significance for GHG emissions. The BAAQMD Guidelines state that the BAAQMD encourages local governments to adopt a qualified GHG Reduction Strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG Reduction Strategy that meets the standards laid out below, it can be presumed that

the project will not have significant GHG emission impacts (BAAQMD 2017). This approach is consistent with the State CEQA Guidelines, Section 15183.5.

Threshold of Significance Applied.

The Updated Scoping Plan is the applicable plan adopted for the purpose of reducing emissions of greenhouse gas. The CDFW, as Lead Agency for the project, has elected to apply the BAAQMD's threshold of 1,100 MT CO_2e per year to determine the project's impact for generation of greenhouse gases. In order to assess the potential impact of construction-generated emissions, construction GHG emissions are annualized over an assumed 30-year project lifespan and added to operational emissions.

Project Impact

Project activities would result in a temporary increase in GHG emissions, including exhaust emissions from on-road haul trucks, worker commute vehicles, and off-road heavy-duty equipment. Construction would require hauling and delivery equipment, as used for similar projects, and which have been accounted for in the State's emission inventory and reduction strategy for both on and off-road vehicles. Construction emissions were estimated using CalEEMod version 2016.3.2, and are estimated to be approximately 73 MT CO_2e from all activities.

The project would not result in any long-term emissions. The project would not increase the County's population or bring new, permanent employees to the project area. As such, the project would not result in substantial long-term operational emissions of GHGs. Total project emissions would be approximately 73 MT CO_2e for less than 1 year, which is substantially less than the emission threshold of 1,100 MT CO_2e. Therefore, the project would generate a less than significant impact.

The project is also evaluated for consistency with the CARB *First Update to the Climate Change Scoping Plan*. The Climate Change Scoping Plan released by the CARB provided strategies for meeting the near-term 2020 greenhouse gas emission reduction goals in AB 32. The *First Update to the Climate Change Scoping Plan* provides recommendations for establishing a mid-term emissions limit that aligns with the long-term (2050) goals of Executive Order S-3-05, which consists of reducing greenhouse gas emissions to 80 percent below 1990 levels. The recommendations cover the energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green building, and cap-and-trade sectors, and are to be implemented by a variety of State agencies.

Although project may benefit (have a reduced generation of GHG) from implementation of some of the State-level regulations and policies, such as the Phase 2 heavy-duty truck greenhouse gas standards proposed to be implemented within the transportation sector, the project would not impede the State in meeting the AB 32 greenhouse gas reduction goals. The recommended next steps in the *First Update Climate Change Scoping Plan* are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of smaller individual infrastructure projects such as the proposed project. Therefore, the project would not conflict with AB 32 or the Climate Change Scoping Plan, and would result in a less than significant impact.

3.8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓

a, b) Transport, Use, Disposal, and Upset or Accident Conditions Involving the Release of Hazardous Materials – Less than Significant Impact

Hazardous materials are substances, or a combination of substances that, due to quantity, concentration, physical, chemical, radiological, explosive, or infectious characteristics, pose a potential danger to humans or the environment. Generally, these materials are categorized as: explosive and blasting agents; flammable and nonflammable gases; combustible liquids and solids; oxidizers; poisons; disease-causing agents; radioactive materials; corrosive materials and other materials, including hazardous wastes.

No aspect of the project would involve the transport, use, disposal, or release of hazardous materials. Only oil, gas and other fluids from automobiles, and SCUBA air tanks would be used. Numerous laws and regulations ensure the safe transportation, use, storage and disposal of hazardous materials. Worker safety regulations cover hazards related to exposure to hazardous materials. Regulations and criteria for the disposal of hazardous materials mandate disposal at appropriate landfills. Because the production company, and other service providers would be required to comply with existing hazardous materials laws and regulations for the transport, use, and disposal of hazardous materials, the impacts associated with the project having the potential to create a significant hazard to the public or the environment would be less than significant.

c) Emit Hazardous Materials within 0.25 Mile of a School – No Impact

There is no impact related to the potential for the project to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school, as no public schools are located or proposed for construction within 0.25 mile of the project sites. No impact has been identified.

d) Included on a List of Hazardous Materials Sites – No Impact

There are no hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Hazardous Waste and Substances Site List or "Cortese" list) within the project area. The nearest sites on any of these lists (hazardous waste and substances sites found on the Department of Toxic Substances Control [DTSC] EnviroStor database, leaking underground storage tanks found on the Geo Tracker database, solid waste disposal sited identified by the Water Board, and hazardous waste facilities subject to corrective action identified by the DTSC) are approximately seven miles west of the project are in Crescent City. The project is not located on the Cortese list and would therefore not create a hazard to the public or environment. No impact would occur.

e) Safety Hazard for People Residing or Working within Two Miles of a Public Airport – No Impact

The closest airports to the project area are Ward Field in Gasquet, followed by the Del Norte County Regional Airport (Jack McNamara Field) operated by the Border Coast Regional Airport Authority. Ward Field is a public airport in Gasquet with one runway. The Del Norte County Regional Airport is located approximately nine miles west of the project area, near the Pacific Ocean and is the primary regional commercial airport serving Del Norte County. Primarily, the airport is a commercial service airport providing airline and general aviation services to the community and the flying public. Crashes and fires associated with aircraft landing, take-off, birds and deer, and fueling operations near the airport are a potential source of hazardous conditions and material releases. The project sites are not located beneath the approach, departure, or sideline zones of the airport, the areas of greatest hazard to people on the ground. No impact has been identified.

f) Safety Hazard for People Residing or Working within Two Miles of a Private Airstrip– No Impact

There are no private airstrips within two miles of the project area. The project would not result in airport-related safety hazards for people residing or working in the project area. No impact would occur.

g) Impair or Interfere with an Adopted Emergency Response/Evacuation Plan – No Impact

The Office of Emergency Services (OES) coordinates countywide response to disasters. OES is responsible for alerting and notifying appropriate agencies when disaster strikes; coordinating all agencies that respond; ensuring resources are available and mobilized in times of disaster; developing plans and procedures for response to and recovery from disasters; and developing and providing preparedness materials for the public. The OES would coordinate evacuation planning in the event of seismic events, slope failure, floods, storms, fires, and hazardous materials spills. The OES is responsible for maintaining the *Del Norte County Emergency Operations Plan*, which serves to address the planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies in or affecting Del Norte County. OES also maintains specific hazard response plans for earthquake, flooding, tsunamis, coastal storms, and other events. The project would not impair or interfere with any emergency response/evacuation plans and does not include development that would significantly increase the number of people exposed to potential emergencies. Furthermore, no roads would be closed as a result of project activities. No impact would occur.

h) Exposure to Wildland Fires – No Impact

The project sites are primarily located in a State Responsibility Area (SRA) as classified by the California Department of Forestry and Fire Protection (CAL FIRE 2007). CAL FIRE has classified and mapped the fire severity zones within SRA areas within the project area as predominantly "Very High."

The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. The project area is within a Very High fire hazard severity zone according to CAL FIRE; however, filming would take place during the winter when the ground and vegetation is not dry and not susceptible to wildland fires. Additionally, the project would take place over an approximate 19-day period and no aspects of the project would result in the ignition of a wildland fire. No impact would occur.

3.9 Hydrology and Water Quality

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?				✓
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				✓
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off- site?				✓
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?				✓
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				✓
f) Otherwise substantially degrade water quality?				✓
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓
j) Inundation by seiche, tsunami, or mudflow?				✓

a, e, f) Violate Water Quality Standards, Substantially Alter Existing Drainage or Degrade Water Quality – No Impact

The Smith River is a designated California Wild and Scenic River. A decision on January 19, 1981, by the Secretary of the Interior added the river and its tributaries to the National system. The Smith River is characterized by clear water, anadromous fish, and surrounded by steep, forested mountains.

No aspect of the project would violate water quality standards, create or contribute runoff water, or otherwise degrade the water quality. There would be brief disturbance as props and platforms are placed or assembled in the water and when they are removed; however, all material would be cleaned prior to placement in the water, with cleaning occurring off-site or away from the stream. Because structures would be placed only on sand, gravel, or cobble substrate away from riffles, any sediment would drop out of the water column quickly.No impact would occur.

b) Substantially Deplete Groundwater Supplies or Interfere with Groundwater Recharge – No Impact

No aspect of the project would substantially deplete groundwater supplies or interfere with groundwater recharge. Water would only be used for drinking water and to clean off props and equipment. No impact would occur.

c, d) Alter Drainage Patterns Resulting in Erosion or Flooding – No Impact

No aspect of the project would substantially alter the drainage patterns at any of the project sites. No equipment other than boats, platforms, and specified props would be in the river. Vehicles would be limited to exposed gravel bars and designated roads, parking lots, bridges, and trails, and would be kept clear of steep banks or other erosion-prone areas. No impact would occur.

g, Place Housing within a 100-Year Flood Zone – No Impact

The proposed project does not involve construction of housing. Therefore, there would be no impact.

h) Place Structures within a 100-Year Flood Zone – No Impact

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) along the Smith River show that the immediate area within the banks of the river are within the 100-year flood zone. The project would not include the placement of any permanent structures in the Smith River. For the truck scene, this would include the placement of a full-size semi-truck in the river and all activity is expected to last for about two days of setup and three days of filming. The engine, radiator, and other internal parts would be removed along with all liquids or fluids and the components thoroughly cleaned in advance and off-site. The truck would be lowered by crane and in sections and assembled in place in shallow water, probably on top of an aluminum platform; locations with fine silt substrate would be avoided. No impact would occur.

i) Flooding From a Levee or Dam Failure – No Impact

The project does not include any activities or components which would expose people or structures to a significant risk of loss from flooding from a levee or dam failure. No prop or equipment installation work would occur within 24 hours of forecast rainfall. In the event of significant (> 0.5 inch) forecast rainfall, any potentially unstable platforms or small props would be removed from the river. No impact would occur.

j) Inundation by Seiche, Tsunami, or Mudflow – No Impact

Mudflows occur on steep slopes where vegetation is not sufficient to prevent rapid erosion but can occur on gentle slopes if other conditions are met. Other factors are heavy precipitation in short periods and an easily erodible source material. Based on area characteristics, the project sites are not down-gradient of a debris-flow source and would not be subject to mudflows. The project sites are also not near any enclosed large water body capable of producing a seiche event. The most recent tsunami hazard maps published by the State of California Geologic Survey (CEMA 2009) indicate that the project area is not within a predicted tsunami inundation zone; therefore, there is no risk of inundation by a tsunami. As noted above, no prop or equipment installation work would occur within 24 hours of forecast rainfall. In the event of significant (> 0.5 inch) forecast rainfall, any potentially unstable platforms or small props would be removed from the river. No impact would occur.

3.10 Land Use and Planning

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				✓
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				✓
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓

a) Physically Divide an Established Community – No Impact

No aspect of the project would physically divide the communities of Hiouchi, Gasquet, or any other community/neighborhood in the project area; therefore, no impact would occur.

b) Conflict with Applicable Land Use Plans, Policies or Regulations – No Impact

Del Norte County General Plan Land Use designations identify both the types of development (e.g., residential, commercial, and industrial) that are permitted and the density or intensity of allowed development. The General Plan Land Use designation for the project sites along the Smith River include Public Facility, None (federal land), Rural Neighborhood, None (State land), and Timberland. Zoning within the project area is generally consistent with the General Plan Land Use designations.

The project would not conflict with any plans, policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Project activities would not conflict with any policies or General Plan Land Use in the Del Norte County General Plan, nor the Del Norte County Code. The project sites are also not within the coastal zone of Del Norte County. No impact has been identified.

c) Conflict with any Applicable Habitat Conservation Plan – No Impact

Del Norte County does not have an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan applicable to the proposed project and project sites. No impact would occur.

3.11 Mineral Resources

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

a, b) Result in the Loss of Availability of a Known Mineral Resource of Value to the Region or Delineated by a General Plan, Specific Plan or other Land Use Plan – Less than Significant Impact

According to the Del Norte County General Plan (Mintier & Associates 2003), the mining industry in Del Norte County was small compared with that of other California counties. Extraction of aggregate mineral resources make up the majority of mining activities in Del Norte County. Sand and gravel are obtained from river, terrace, and beach deposits. Aggregate mining activities occur primarily along the lower Smith River, with some activity on the Klamath River and its tributaries.

There are no mining operations in the immediate project area. The project would not require the use of any mineral resource, and would not result in the loss of availability of known mineral resources of value to the State, region or locally; therefore, no impact would occur.

3.12 Noise

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?				✓
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				✓
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓

a, c, d) Exposure to Noise in Excess of Established Standards or Substantially Increase of Existing Levels Either Permanently or Temporarily – Less than Significant Impact

The surrounding area is primarily characterized by undeveloped forest land, low density residential uses, commercial uses along US 199, and the Smith River. Noise levels in the project area vary depending on the proximity of the noise source(s) to human activity. The major noise source in the project area includes vehicular traffic on US 199. Ambient noise (background noise) levels in the

project area are reduced as distance from the human activities listed above are increased. A noise sensitive receptor is a receptor at which there is a reasonable degree of sensitivity to noise, such as residences, schools, hospitals, elderly care facilities, libraries, cemeteries, and places of worship. Noise sensitive receptors and noise sensitive areas in the project area and immediate vicinity include residences.

Typically, municipal noise ordinances provide noise limits associated with construction; however, Del Norte County does not have a specific noise ordinance in their municipal code. The Del Norte County General Plan Safety and Noise Element includes noise standards applicable to permanent development of transportation infrastructure and stationary sources. However, the General Plan does not address construction-related noise.

The primary noise source in the project area is and would continue to be transportation-related. US 199 would continue to have noise impacts in the project area; however, noise impacts from the project itself would be minimal due to the nature of the project, and distance of the project sites to sensitive receptors.

The project is temporary with approximately 19 days of filming. The project does not include construction or the use of any heavy construction equipment. The primary noise sources associated with project activities include the use of a generator(s) and compressor(s) for lighting and heating. Generator or compressor use would be limited to daylight hours. Muffled or other relatively quiet generators would be used and, when practical, they would be staged on bridges or in parking lots away from sensitive areas.

Sound from a point source is known to attenuate, or reduce, at a rate of 6 decibel (dB) for each doubling of distance. For example, a noise level of 84 dB Leq (equivalent continuous sound pressure level) as measured at 50 feet from the noise source would attenuate to 78 dB Leq at 100 feet from the source and to 72 dB Leq at 200 feet from the source to the receptor. The exact model of generator and air compressor to be used are unknown; however, based on the reference noise levels, above, the noise levels generated by a generator at any of the project sites may reach a maximum of approximately 85 dB Leq at 23 feet (conservative estimate) while in use. Many generator manufacturers measure from approximately 23 feet (7 meters) away and the mid-to-large sized portable generators (6,500 to 14,000 Watts) range between mid-70 and mid-80 dBA (A-weighted sound level).

The closest noise sensitive receptors are neighboring homes in the project area. Because of the short duration of project activities, approximately 19 days of total filming at a number of different sites, the use of relatively quiet generators, and the fact that the project does not include any demolition or construction activities, the impact would be less than significant.

b) Exposure to Ground Borne Vibration or Noise – No Impact

The project is not expected to generate any ground borne vibration or ground borne noise as project activities do not include construction activities, pile driving, or any other activities capable of substantial ground borne vibration or noise. No impact would occur.

e, f) Exposure of People Residing or Working Near a Private or Public Airport to Excessive Noise Levels – No Impact

The nearest public airports to the project area are Ward Field in Gasquet and the Del Norte County Regional Airport, located approximately 9 miles west of the project area. The project sites are not located beneath the approach, departure, or sideline zones of the airport. There are no private

airstrips in the project vicinity. The project would not expose people residing or working near Ward Field or the Del Norte County Regional Airport or a private airstrip to excessive noise levels, therefore no impact would occur.

3.13 Population and Housing

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

a) Induce Substantial Population Growth – No Impact

The proposed project includes activities directly related to filming of the movie "Bird Box." The project would not create any housing nor necessitate the development of housing. It would not result in the extension of utilities or roads or other infrastructure into outlying or exurban areas and would not directly or indirectly lead to the development of new sites that would induce population growth. Temporary housing for the approximate 250 film crew and actors would be located at Redwood RV Park, on SR 199 in Hiouchi and located midway between the primary filming locations and a short distance north of the Smith River. No impact would occur.

b, c) Displace Housing or People – No Impact

No aspect of the project would displace any housing or people; therefore, no impact would occur.

3.14 Public Services

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

a) Substantial Adverse Physical Impacts Associated with New or Altered Fire or Police Protection, Schools, Parks, or other public facilities – No Impact

For fire protection services, the project area is protected by CAL FIRE and a local volunteer district. The Del Norte County Sheriff's Office provides a variety of public safety (court services, corrections, emergency operations) and law enforcement services throughout the county including in the project area. The Del Norte County Sheriff's Office provides law enforcement services to the residents of Hiouchi and other unincorporated areas in the region.

The Del Norte County Unified School District provides county-wide educational services to students in Del Norte County. The schools serving Hiouchi are located in Crescent City approximately eight miles to the west. The nearest library to the project site is the Del Norte County Library located at 190 Price Mall in Crescent City. Parkland in the project area includes the Jedediah Smith Redwoods State and National Park. There are a number of recreational opportunities along the Smith River in the project vicinity.

As discussed in Section 3.13.1, the project would not directly or indirectly induce population growth nor create new demand for services. Therefore, the project would have no impact on the service ratios, response times, or other performance objectives of schools, parks, and other public facilities and services that are based on population growth. The project would not require new or physically altered government facilities to serve the project site. The boat that would be used throughout filming would be a small craft with a small trolling motor or similar. A Del Norte County Sheriff officer would be on scene for safety. No impact would occur.

3.15 Recreation

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				✓
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				✓

a) Increase in the Use of Existing Facilities Resulting in Substantial Physical Deterioration – No Impact

The project area includes recreational activities such as hiking, whitewater rafting/kayaking, swimming, fishing and other activities along the Smith River and Six Rivers National Forest and Jedediah Smith State Park. As discussed in Impact 3.13.1a (Population and Housing), the project would not directly or indirectly induce substantial population growth. Therefore, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Total filming is expected to last approximately 19 days not including bad weather days. No impact would occur.

b) Development of Recreation Facilities that Could Result in Adverse Physical Effects on the Environment – No Impact

The project would not include recreational facilities. As discussed in Impact 3.13.1a (Population and Housing), the project would not directly or indirectly induce substantial population growth. Therefore, the project would not require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. No impact would occur.

3.16 Transportation/Traffic

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			✓	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				✓
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e) Result in inadequate emergency access?				✓
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				✓

a) Conflict with an Applicable Plan, Ordinance, Policy, or Program Establishing Measures of Effectiveness for the Performance of the Circulation System – Less than Significant Impact

Level of Service (LOS) is a quantitative measure that characterizes operation of transportation facilities. Using data relative to volumes, right-of-way (ROW) controls, and lane configurations, the relative experience of drivers using the transportation system can be evaluated. It "grades" the operation of the facility similar to a report card; a LOS of "A" is representative of generally free-flowing conditions while a LOS of "F" is representative of long delays or failed operations. Per Policy 8.B.6 of the Del Norte County General Plan, the county shall endeavor to manage its

roadway system so as to maintain LOS C operation, except for intersections with any State highway, where Level of Service D shall be acceptable. Policy 8.A.11 states that the county shall encourage California Department of Transportation (Caltrans) and the Regional Transportation Agency to provide for a LOS D or better on all State highways within the county.

Vehicles are expected to include up to 50 cars or SUVs, up to 10 trailers, and up to 10 stakebed trucks. Project activities would generate additional temporary traffic and traffic from large trucks for the approximate 19-day film shoot. Vehicle and truck trips are conservatively estimated at 50 worker vehicles (x4 trips/day), 10 vendor vehicles (x4 trips/day), and 10 trucks (x2 trips/project). Project activities would be temporary (approximately 19 days), would not substantially increase traffic volume in the project area, and would not negatively impact LOS on area roadways. Road and lane closures are not expected.

Project activities would have an anticipated duration of approximately 19 days and primarily during daylight hours. Some setup and takedown may occur before dawn or after dusk (4:00 am to 10:00 pm). Because of the temporary nature of project activities, including vehicle/truck trips, project activities would increase traffic on local roadways, but not create a substantial increase in traffic on roads within the project area and on US 199.

Given the low traffic levels in the project area along US 199, the small scale and duration of project activities, the potential impacts to motor vehicles, pedestrians, and bicyclists would be minor. The impact is less than significant.

b) Conflict with an Applicable Congestion Management Program – No Impact

There is no Congestion Management Program; therefore, there would be no impact.

c) Result in a Change in Air Traffic Patterns – No Impact

No aspect of the project would affect air traffic patterns of the Del Norte County Regional Airport; therefore, there would be no impact.

d) Substantially Increase Hazards due to a Design Feature or Incompatible Use – Less than Significant Impact

The project would not change the geometry of any street or the roadway network in the project area. Therefore, no potentially hazardous roadway design features would be introduced by the project. As discussed above, the presence of vehicles/SUVs and equipment on nearby roadways could increase the normal traffic hazard in the project area; however, the duration of filming would be for only 19 days and primarily along the Smith River, not along US 199.

Equipment and delivery trucks would access the project sites from US 199 from the east and west. Project vehicles would not be parked to block public ROW. The project would not substantially increase hazards due to a design feature or incompatible use; therefore, the impact is less than significant.

e) Result in Inadequate Emergency Access – No Impact

The project would not result in inadequate emergency access. The project would comply with applicable Fire Department regulations for access, and California Building Standards Code (Title 24) for safety. All project area roadways would continue to provide adequate turning radii for emergency services (fire trucks) and deliveries. Project activities would not block emergency access roadways such as US 199; therefore, no impact would occur.

f) Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Otherwise Decrease the Performance or Safety of Such Facilities – No Impact

Redwood Coast Transit is the principal transit service provider within Del Norte County. Redwood Coast Transit provides fixed route service along the US 199 corridor from Crescent City to Gasquet, including Hiouchi.

Walking and cycling are year-round transportation choices for many Del Norte County residents. Pedestrian facilities (sidewalks on public streets) are not provided in the project area. For bicycling, many portions of US 199 have narrow shoulders, large vehicle traffic and/or limited visibility.

The Del Norte County General Plan Policy Document is the guiding document addressing bicycle, pedestrian and transit facilities in the project area and surrounding unincorporated areas. The project would not conflict with the *Del Norte County General Plan* or *Del Norte County and Crescent City 2010 Bicycle Facilities Plan Update*, nor adversely affect facilities for public transit, bicycles, or pedestrians. No impact would occur.

3.17 Tribal Cultural Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			✓	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?			✓	

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a, b) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? (Less than Significant Impact)

CEQA requires lead agencies to determine if a proposed project would have a significant effect on tribal cultural resources. The CEQA Guidelines define tribal cultural resources as: (1) a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in PRC Section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be

significant according to the historical register criteria in PRC Section 5024.1(c), and considering the significance of the resource to a California Native American tribe.

As of the writing of this report, no Native American tribes have requested formal notification from CDFW of proposed projects in the project area per PRC Section 21080.3.1. Project activities do not include excavation or any other kind of earthwork; therefore, the potential for discovering unknown tribal cultural resources is very low. The impact is less than significant. Notification letters dated December 22, 2017 have been sent to Chairman Attebery, Kaurk Tribe, Chairman O'Rourke, Yurok Tribe of California, Chairman Sullivan, Tolowa Dee-ni Nation, Chairman Dowd, Resighini Rancheria, and Chairman Miller, Elk Valley Rancheria

3.18 Utilities and Service Systems

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				✓
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				✓
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				✓
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g) Comply with federal, state, and local statutes and regulations related to solid waste?				✓

a) Exceed Applicable Wastewater Treatment Requirements – No Impact

Implementation of the proposed project would not exceed wastewater treatment requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) because the proposed project would not produce any wastewater or lead to an increase in wastewater in the community. No impact has been identified.

b, e) Require Construction or Expansion of New Water or Wastewater Facilities – No Impact

The proposed project would not add new water or wastewater facilities or require construction of new water or wastewater facilities. Filming of the "Bird Box" movie would take place over an approximate 19 days. No other aspect of the project would require construction of additional, or expansion of existing, water facilities. No impact has been identified.

c) Require Construction or Expansion of New Stormwater Facilities – No Impact

No aspect of the project would require the construction of expansion of new stormwater facilities. No equipment other than boats, platforms, and specified props would enter the river. Vehicles would be limited to exposed gravel bars and designated roads, parking lots, bridges, and trails, and would be kept clear of steep banks or other erosion-prone areas. No impact would occur.

d) Have Sufficient Water Supplies to Serve the Project – No Impact

The BRCSD supplies water in the project area. The BRCSD withdraws water from the Smith River. There is a well head located close to the River with two pump houses for water transmission. The system serves approximately 100 residential and commercial meters. The system includes 2.5 miles of pipe, 15 fire hydrants, two emergency generators, a supervisory control and data acquisition (SCADA) system, and two Redwood storage tanks. The tanks are located on Hiouchi Mountain and include a 100,000 gallon tank which serves a majority of the town and a 50,000 gallon tank at a higher elevation that serves a second smaller pressure zone.

The BRCSD is responsible for supplying water within Hiouchi and the project area and for ensuring that the delivered water quality meets applicable California Department of Health Services standards for drinking water. Water would only be used for drinking water for the film crew and actors for the approximate 19 days of filming. Watering of any dirt roads is not anticipated as project filming would take place during the winter. No impact would occur.

f) Have Sufficient Landfill Capacity – Less than Significant Impact

The Del Norte Solid Waste Management Authority is a joint powers authority formed by the City of Crescent City and the County of Del Norte in 1992 to administer and manage all solid waste, recycling, composting, and household hazardous waste facilities, services, and programs throughout Del Norte County. There are three transfer stations in the county, the Del Norte County Transfer Station, the Klamath Transfer Station, and Gasquet Transfer Station. The Crescent City Landfill closed to the public in March 2005.

Solid waste is exported from the Del Norte County Transfer Station to the Dry Creek Landfill in White City, Oregon. According to their website, Dry Creek Landfill's projected operational life exceeds 100 years under any scenario (Rogue Disposal & Recycling 2015).

A temporary increase in the production of solid waste from trash and debris from filming would occur, and is anticipated to be primarily food waste, packaging and containers from film crew and actors. All waste would be disposed of in trach receptacles or bins. Solid waste removal in the project area is provided by Recology Del Norte, which delivers trash to the Del Norte County Transfer Station. Solid waste is exported from the Del Norte County Transfer Station to the Dry Creek Landfill in White City, Oregon. According to their website, Dry Creek Landfill's projected operational life exceeds 100 years under any scenario (Rogue Disposal & Recycling 2015). This would be a less than significant impact on landfill capacity with the implementation of, and adherence to, federal, State, and local statutes and regulations related to solid waste.

g) Comply with Statutes and Regulations Related to Solid Waste – No Impact

As noted above, all waste would be disposed of in trach receptacles or bins. Recology Del Norte must comply with all county and State solid waste diversion, reduction, and recycling mandates, including compliance with the Del Norte Countywide Integrated Waste Management Plan. No impact would occur.

3.19 Mandatory Findings of Significance

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			✓	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			✓	
c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?			✓	

a, c) Degrade Environmental Quality or Adversely Affect Human Beings – Less than Significant Impact

Because of the small scale, scope, and duration of the project, the project as a whole does not have the potential to significantly degrade the quality of the environment, including air quality, fish or wildlife species or their habitat, plant or animal communities, important examples of the major periods of California history or prehistory, geologic resources, hazards, water resources, land use compatibility, noise, traffic movement, or other adverse effects, directly or indirectly, on human beings. All impacts are less than significant or would have no impact at all.

b) Cumulatively-Considerable Impacts – Less than Significant Impact

The project's individual impacts would not add appreciably to any existing or foreseeable future significant cumulative impact, such as visual quality, historic resources, traffic impacts, or air quality degradation. Incremental impacts, if any, would be small and undetectable. As reported throughout this document, cumulative impacts to which this project would contribute would be less than significant.

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Appendices

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Appendix A – CalEEMod Emissions

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Bird Box Movie Project

Del Norte County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	113
Climate Zone	14			**Operational Year**	2018
Utility Company	Statewide Average				
CO2 Intensity (lb/MWhr)	1001.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Short-duration project run in Construction Module

Land Use - 19 Days Filming

Construction Phase - project-specific durations

Off-road Equipment - Assume 1 large (250hp) generator, 5 small (84hp) generators

Off-road Equipment - Assume 1 Crane, 1 Forklift, 1 Tractors/Loaders/Backhoes

Trips and VMT - Assumes 50 worker vehicles (x4 trips/day), 10 vendor vehicles (x4 trips/day), and 10 trucks (x2 trips/project). Default trip lengths for Worker and Vendor. ~10 miles from Crescent City to Hiouchi. ~18 miles from Crescent City to Gasquet. 175 miles within NCUAQMD for each Haul Trip

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	4.00
tblConstructionPhase	NumDays	0.00	19.00
tblOffRoadEquipment	HorsePower	84.00	250.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	175.00
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	200.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0574	0.3394	0.4406	8.2000e-004	0.0263	0.0134	0.0396	7.0700e-003	0.0132	0.0203	0.0000	72.5273	72.5273	5.0200e-003	0.0000	72.6529
Maximum	**0.0574**	**0.3394**	**0.4406**	**8.2000e-004**	**0.0263**	**0.0134**	**0.0396**	**7.0700e-003**	**0.0132**	**0.0203**	**0.0000**	**72.5273**	**72.5273**	**5.0200e-003**	**0.0000**	**72.6529**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Truck Scene Setup-Take down	Building Construction	1/22/2018	1/25/2018	5	4	2-day setup, assumed 2 day takedown
2	Filming	Building Construction	1/22/2018	2/15/2018	5	19	19-day Filming

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Truck Scene Setup-Take down	Cranes	1	8.00	231	0.29
Truck Scene Setup-Take down	Forklifts	1	6.00	89	0.20
Truck Scene Setup-Take down	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Filming	Cranes	0	4.00	231	0.29
Filming	Forklifts	0	6.00	89	0.20
Filming	Generator Sets	5	6.00	84	0.74
Filming	Generator Sets	1	6.00	250	0.74
Filming	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Truck Scene Setup-Take down	3	0.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Filming	6	200.00	40.00	20.00	16.80	6.60	175.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Truck Scene Setup-Take down - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9400e-003	0.0213	0.0115	2.0000e-005		1.1500e-003	1.1500e-003		1.0600e-003	1.0600e-003	0.0000	1.8302	1.8302	5.7000e-004	0.0000	1.8444
Total	**1.9400e-003**	**0.0213**	**0.0115**	**2.0000e-005**		**1.1500e-003**	**1.1500e-003**		**1.0600e-003**	**1.0600e-003**	**0.0000**	**1.8302**	**1.8302**	**5.7000e-004**	**0.0000**	**1.8444**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Filming - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0233	0.2066	0.1579	3.7000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	32.1209	32.1209	1.8700e-003	0.0000	32.1678
Total	**0.0233**	**0.2066**	**0.1579**	**3.7000e-004**		**0.0110**	**0.0110**		**0.0110**	**0.0110**	**0.0000**	**32.1209**	**32.1209**	**1.8700e-003**	**0.0000**	**32.1678**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1000e-003	0.0289	0.0174	7.0000e-005	1.4300e-003	2.8000e-004	1.7100e-003	3.9000e-004	2.7000e-004	6.7000e-004	0.0000	6.3455	6.3455	1.1000e-004	0.0000	6.3483
Vendor	3.5500e-003	0.0548	0.0382	9.0000e-005	2.1900e-003	6.3000e-004	2.8300e-003	6.4000e-004	6.1000e-004	1.2400e-003	0.0000	8.8602	8.8602	3.5000e-004	0.0000	8.8689
Worker	0.0276	0.0279	0.2157	2.6000e-004	0.0226	3.0000e-004	0.0229	6.0300e-003	2.7000e-004	6.3100e-003	0.0000	23.3705	23.3705	2.1200e-003	0.0000	23.4235
Total	**0.0322**	**0.1116**	**0.2712**	**4.2000e-004**	**0.0263**	**1.2100e-003**	**0.0275**	**7.0600e-003**	**1.1500e-003**	**8.2200e-003**	**0.0000**	**38.5762**	**38.5762**	**2.5800e-003**	**0.0000**	**38.6407**

Bird Box Movie Project

Del Norte County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	113
Climate Zone	14			**Operational Year**	2018
Utility Company	Statewide Average				
CO2 Intensity (lb/MWhr)	1001.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Short-duration project run in Construction Module

Land Use - 19 Days Filming

Construction Phase - project-specific durations

Off-road Equipment - Assume 1 large (250hp) generator, 5 small (84hp) generators

Off-road Equipment - Assume 1 Crane, 1 Forklift, 1 Tractors/Loaders/Backhoes

Trips and VMT - Assumes 50 worker vehicles (x4 trips/day), 10 vendor vehicles (x4 trips/day), and 10 trucks (x2 trips/project). Default trip lengths for Worker and Vendor. ~10 miles from Crescent City to Hiouchi. ~18 miles from Crescent City to Gasquet. 175 miles within NCUAQMD for each Haul Trip

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tblConstructionPhase	NumDays	0.00	19.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	175.00
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	200.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	6.5689	43.7807	50.2962	0.0941	2.9589	1.8615	4.8205	0.7916	1.8090	2.6006	0.0000	9,244.0929	9,244.0929	0.8299	0.0000	9,264.8389
Maximum	**6.5689**	**43.7807**	**50.2962**	**0.0941**	**2.9589**	**1.8615**	**4.8205**	**0.7916**	**1.8090**	**2.6006**	**0.0000**	**9,244.0929**	**9,244.0929**	**0.8299**	**0.0000**	**9,264.8389**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Truck Scene Setup-Take down	Building Construction	1/22/2018	1/25/2018	5	4	2-day setup, assumed 2 day takedown
2	Filming	Building Construction	1/22/2018	2/15/2018	5	19	19-day Filming

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Truck Scene Setup-Take down	Cranes	1	8.00	231	0.29
Truck Scene Setup-Take down	Forklifts	1	6.00	89	0.20
Truck Scene Setup-Take down	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Filming	Cranes	0	4.00	231	0.29
Filming	Forklifts	0	6.00	89	0.20
Filming	Generator Sets	5	6.00	84	0.74
Filming	Generator Sets	1	6.00	250	0.74
Filming	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Truck Scene Setup-Take down	3	0.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Filming	6	200.00	40.00	20.00	16.80	6.60	175.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Truck Scene Setup-Take down - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9704	10.6314	5.7670	0.0100		0.5758	0.5758		0.5297	0.5297		1,008.7146	1,008.7146	0.3140		1,016.5652
Total	**0.9704**	**10.6314**	**5.7670**	**0.0100**		**0.5758**	**0.5758**		**0.5297**	**0.5297**		**1,008.7146**	**1,008.7146**	**0.3140**		**1,016.5652**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Filming - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4483	21.7436	16.6166	0.0394		1.1588	1.1588		1.1588	1.1588		3,727.0818	3,727.0818	0.2175		3,732.5193
Total	**2.4483**	**21.7436**	**16.6166**	**0.0394**		**1.1588**	**1.1588**		**1.1588**	**1.1588**		**3,727.0818**	**3,727.0818**	**0.2175**		**3,732.5193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1156	3.0019	1.8586	7.0800e-003	0.1600	0.0299	0.1898	0.0438	0.0286	0.0724		736.6554	736.6554	0.0132		736.9861
Vendor	0.3618	5.7311	3.8409	9.9800e-003	0.2443	0.0660	0.3104	0.0703	0.0632	0.1335		1,035.4075	1,035.4075	0.0393		1,036.3909
Worker	2.6727	2.6727	22.2131	0.0277	2.5546	0.0311	2.5857	0.6775	0.0288	0.7062		2,736.2336	2,736.2336	0.2458		2,742.3774
Total	**3.1501**	**11.4057**	**27.9126**	**0.0447**	**2.9589**	**0.1270**	**3.0859**	**0.7916**	**0.1205**	**0.9121**		**4,508.2965**	**4,508.2965**	**0.2983**		**4,515.7544**