

KENO WILDLANDS ALLIANCE

OFFICIAL POSITION

ON THE
KLAMATH FALLS ENERGY CENTER

August 9, 2026

Revisions will be made as needed or required. For current version go to:
kenowildlandsalliance.com/resources



Keno Wildlands Alliance
PO Box 651, Keno, OR 97627

The Keno Wildlands Alliance would like to acknowledge and thank Keno community member Scott Parker for the use of his paper, “FORMAL OPPOSITION REPORT, Klamath Falls Energy Center (KFEC), Proposed 400 MW Solar & Battery Storage Facility”, May, 2026, used in large part in the writing of this Position Paper.

Table of Contents

LIST OF ACRONYMS	5
Executive Summary	6
I. Project Description and Site Context	9
1.1 Basic Project Parameters.....	9
1.2 The Keno Community.....	10
II. Wildfire and Battery Energy Storage System (BESS) Fire Risk	11
2.1 Oregon's Elevated Wildfire Context and Keno's Specific Exposure	11
2.2 BESS Thermal Runaway: The Critical Danger	11
2.3 Critical Evacuation Route Vulnerabilities	12
2.4 Toxic Plume and Atmospheric Dispersion Risks	13
2.5 Keno RFPD Capability Assessment.....	13
Specific Questions the Applicant Must Answer:	14
III. Water: Wells, Drainage, Wetlands, Runoff, and Fish Habitat.....	17
3.1 Groundwater and Domestic Wells	17
Well Logs and Baseline Data Required:.....	18
3.2 Surface Drainage, Wetlands, and Runoff	18
3.3 Microclimate and Local Environmental Changes	19
Documentation Residents Should Provide to EFSC:	19
3.4 Threatened and Endangered Fish: Coho Salmon, Steelhead and the Klamath Restoration	19
Specific Questions for EFSC Review:	20
IV. Wildlife Corridors: Mule Deer, Elk, Wolves, Birds, and Habitat	21
4.1 The Keno Mule Deer Herd: A Named, Scientifically Documented Population	21
4.2 Wolves and Apex Predators	22
4.3 Birds: Migratory Species and the Lower Klamath National Wildlife Refuge	22
Specific Questions for EFSC Review:	23
V. Traffic, Road Damage, and Emergency Access	24
5.1 Construction Traffic on County Highway 603	24
Documentation Residents Should Submit:	24

Specific Questions for EFSC Review:	25
5.2 Logging Trucks and Competing Road Uses.....	25
VI. Noise: Construction, Operations, Inverters, Substations, and BESS.....	26
6.1 Construction Noise.....	26
6.2 Operational Noise: Inverters, Transformers, and Substations	26
Specific Questions for EFSC Review:	27
VII. Land Use Compatibility and Regulatory Compliance	28
7.1 Oregon Goal 4: Forest Lands Protection	28
7.2 KCLDC Conditional Use Requirements	28
7.3 Oregon HB 3179 (2023): Solar Siting Reform.....	28
Specific Questions for EFSC Review:	28
VIII. Cultural, Archaeological, and Tribal Resource Concerns	29
8.1 The Klamath-Modoc Archaeological Landscape	29
8.2 Traditional Tribal Land Uses and Treaty Rights	29
Specific Questions for EFSC Review:	30
IX. Public Services: Fire, Law Enforcement, Medical, and Housing	31
9.1 Fire Protection Capacity Gap.....	31
9.2 Grid Capacity and Transmission Infrastructure Limitations	31
9.3 Cumulative Impacts and Track Record of Solar Development in Klamath County	32
9.4 Law Enforcement and Medical Services	32
9.5 Housing and RV Park Strain.....	32
Specific Questions for EFSC Review:	33
X. Decommissioning, Financial Assurance, and Who Pays if the Project Fails.....	34
10.1 The Scale of the Decommissioning Problem	34
10.2 Oregon's Current Financial Assurance Framework and Its Gaps	34
10.3 Reforestation: Can the Forest Be Restored?	35
10.4 Landowner Responsibility: Green Diamond Resource Company	35
Specific Questions for EFSC Review:	36
XI. Scenic Resources, Recreation, and Quality of Life	38

11.1 Scenic Impacts.....	38
11.2 Recreation and Historic Land Use	38
XII. Community Action: Evidence the Public Should Submit to EFSC	39
12.1 Documentary Evidence to Gather Now	39
Water and Hydrology Evidence	39
Fire and Safety Evidence	39
Road and Traffic Evidence	40
Wildlife and Cultural Evidence	40
Written Statements from Landowners	40
XII. Conclusion	42
XIIV. Master List of Questions for the Formal ASC Review	43
Wildfire and BESS Safety	43
Water and Hydrology	44
Wildlife and Habitat	44
Traffic and Roads	45
Noise	45
Land Use and Regulatory Compliance	46
Cultural Resources	46
Public Services.....	46
Decommissioning and Financial Assurance	47
References	48
Government and Regulatory Sources	48
Peer-Reviewed and Scientific Sources	49
News and Community Sources	50
Additional References:	50

LIST OF ACRONYMS

AERMOD: American Meteorological Society/Environmental Protection Agency

ASC: Application for Site Certification

BESS: Battery Energy Storage System

CDFW: California Department of Fish and Wildlife

CO: Carbon Monoxide

EFSC: Energy Facility Siting Council

HCN: Hydrogen Cyanide

HF: Hydrogen Fluoride

HPRCSIT: Historic Places and areas of religious or cultural significance to Indian tribes

IAFF: International Association of Fire Fighters

KFEC: Klamath Falls Energy Center

MW: Mega Watts

MWh: Mega Watt Hours

NOAA: National Oceanic and Atmospheric Administration

NOI: Notice of Intent

ODFW: Oregon Department of Fish and Wildlife

ODOE: Oregon Department of Energy

PFAS: Per- and Polyfluoroalkyl Substances (“Forever Chemicals”)

PV: Photovoltaic

USGS: U. S. Geological Survey

"If there is any one duty which more than another we owe it to our children and our children's children to perform at once, it is to save the forests of this country, for they constitute the first and most important element in the conservation of the natural resources of this country."

– Theodore Roosevelt



OFFICIAL POSITION ON THE KLAMATH FALLS ENERGY CENTER

Executive Summary

The Keno Wildlands Alliance strongly opposes the Klamath Falls Energy Center (KFEC). This 400 MW solar photovoltaic and battery energy storage system (BESS) on approximately 8,600 acres of private timberland would industrialize critical forested habitat just 1.5 miles northwest of our community.

The project presents unacceptable risks to public safety, water resources, wildlife corridors, cultural values, and the rural character of Keno. After thorough review of the Notice of Intent (NOI), the Oregon Energy Facility Siting Council (EFSC) Project Order (May 11, 2026), and related materials, we conclude that the proposal fails to adequately address Oregon Statewide Planning Goal 4 (Forest Lands), wildlife protections, wildfire/BESS safety, hydrological impacts, and community safety needs.

The Oregon Department of Energy's Project Order specifically identifies the following as required application review areas: land use, protected areas, retirement/financial assurance, fish and wildlife, threatened and endangered species, scenic resources, cultural resources, recreation, public services, wildfire, waste, water, and noise. This report addresses each of these areas in turn with supporting evidence, expert citations, and specific questions the applicant must answer in the formal Application for Site Certificate (ASC).

This Position Paper outlines our key concerns, supported by scientific literature, agency guidance, and local knowledge, and provides specific questions the applicant must answer in the Application for Site Certificate (ASC, due December 2027). We also detail recommended actions for residents and the Alliance. Currently, our central findings are:

- The Keno Rural Fire Protection District is a volunteer department of approximately twenty personnel. It is manifestly incapable of suppressing a lithium-ion battery thermal runaway event of the scale KFEC's storage system would involve. No water supply infrastructure exists on site.
- The site is directly adjacent to the primary evacuation route for Keno residents, and construction traffic alone — conservatively hundreds of heavy truck loads daily — will damage County Highway 603 (Clover Creek Road) beyond its current load-bearing capacity without county-funded repairs.
- The site is located within the winter range and migration corridor of the scientifically documented Keno mule deer herd and East Shasta Roosevelt elk herd, and clearing 8,600 acres will permanently sever critical habitat connectivity.
- The project site is due north of the Klamath River at a time of critical salmon and steelhead restoration following dam removals; additional watershed disruption and changes pose direct threats to threatened coho salmon and federally protected fish habitat.
- Clear-cutting thousands of acres of forest will reduce groundwater recharge for wells serving Keno residents, accelerate surface runoff into Klamath tributaries, and permanently alter the watershed hydrology upon which both residents and downstream fisheries depend.
- The project area encompasses known Klamath-Modoc cultural and archaeological resources. The Keno Pictographs and adjacent traditional-use landscapes have not been adequately surveyed. No Section 106 consultation with the Klamath Tribes has been documented in the NOI.
- Under Oregon's EFSC Retirement and Financial Assurance Standard (OAR 345-022-0050), a bond or letter of credit must be in place before construction and maintained until the facility is retired. The amount is set case-by-case; parent guarantees are weaker than surety bonds or irrevocable letters of credit, and any under-estimation of decommissioning costs leaves Klamath County taxpayers exposed to cleanup liability.
- The project requires a formal exception to Oregon Statewide Planning Goal 4 (Forest Lands) and must meet all Klamath County Land Development Code (KCLDC) conditional use criteria, traffic, drainage, archaeological, and solar siting standards — none of which have been demonstrated in the NOI.

We call on EFSC, the Oregon Department of Energy (ODOE), Klamath County, and Ørsted to deny the project or require extraordinary mitigation, including full studies, enforceable

protections, and consideration of alternative sites on already-disturbed or industrial zoned lands.

EFSC PROJECT ORDER: *The Oregon Department of Energy's Project Order specifically identifies the following as required application review areas: land use, protected areas, retirement/financial assurance, fish and wildlife, threatened and endangered species, scenic resources, cultural resources, recreation, public services, wildfire, waste, water, and noise. This report addresses each of these areas in turn with supporting evidence, expert citations, and specific questions the applicant must answer in the formal Application for Site Certificate (ASC).*

I. Project Description and Site Context

1.1 Basic Project Parameters

The KFEC, as described in the NOI submitted December 22, 2025, involves the following:

KFEC Key Project Facts (from NOI)	
Owner:	Green Diamond Resource Company
Developer:	Klamath Falls Energy Center LLC / Ørsted North America Inc. (Denmark)
Capacity:	400 MW solar photovoltaic + battery energy storage system (BESS)
Site Area:	~8,600 acres of private timberland (Green Diamond Resource Company)
Location:	~1.5 miles NW of Keno; north of Clover Creek Road (County Highway 603)
Site Boundary:	Due north of Klamath River, south of Aspen Lake, east of Oatman Lake and west of Round Lake
Interconnection:	PacifiCorp Klamath CoGen–Meridian 500 kV line on-site
Estimated Operations Start:	2032
Land Action Required:	Complete clear-cutting of all trees and vegetation on 8,600 acres
Regulatory Pathway:	Oregon EFSC Site Certificate (facility exceeds local jurisdiction threshold)

1.2 The Keno Community

Keno is an unincorporated community in Klamath County with a 2020 census population of approximately 1,980 people, situated on the Klamath River at an elevation of 4,114 feet. The community is served by Keno Elementary School, the Keno Rural Fire Protection District (a volunteer department), and relies on private wells for domestic water supply. The nearest full-service hospital and law enforcement headquarters are in Klamath Falls, approximately 15 miles to the east. County Highway 603 (Clover Creek Road) is the primary arterial connecting Keno to the KFEC site and to Klamath Falls.

Residents chose Keno in part because of its forested mountain setting, clean air and water, low-traffic rural character, the quiet sounds of nature and lack of urban noise, dark night skies and proximity to the Klamath River. The KFEC project would transform the forested uplands and natural quiet that define Keno's landscape, stripping 13.4 square miles of living forest to make way for industrial solar infrastructure, a scale of change that would alter the visual, hydrological, ecological, and safety characteristics of the area for the lifetime of the facility and beyond.

“This land is literally the life stream of this entire area down to the Klamath River. All of our water that all of our wells are attached to comes from the snowpack. Every herd animal that comes through here relies on these forests to drink water during their migration period. We raised our families here, knowing that was protected land.” — Elvina Contla, Keno Resident (February 2026 Community Meeting)

II. Wildfire and Battery Energy Storage System (BESS) Fire Risk

This section addresses the EFSC review area of Wildfire. It presents the most urgent life-safety concerns associated with the KFEC proposal and raises specific questions the applicant must answer in the formal ASC. There are two areas of wildfire hazard concern: 1.) wildfires sparked by overheated solar panels, and 2.) wildfires sparked by thermal runaway BESS facility fires.

2.1 Oregon's Elevated Wildfire Context and Keno's Specific Exposure

Oregon is among the states with the most severe projected increases in wildfire probability, according to the U.S. Department of Energy's analysis. Klamath County has experienced multiple major wildfires in recent years, and the Klamath Basin was preparing for an early fire season as of February 2026, with Klamath Tribes Chairman William E. Ray Jr. noting at that month's community meeting that unusually warm conditions were generating concern. The KFEC site — 8,600 acres of forest land adjacent to additional private industrial forest managed by Green Diamond — represents an enormous fuel complex within which an ignition event during red flag conditions could spread rapidly.

Once solar panels are installed, the site will no longer burn like a managed forest. Instead, industrial fencing, wiring, and panel arrays will channelize fire behavior in unpredictable ways. The National Wildfire Coordinating Group (NWCG) has specifically warned that photovoltaic systems present unique dangers in wildland fire situations, including the release of toxic chemicals, risk of electric shock, and the continuous production of electricity even when surrounded by fire.

NWCG Warning: *The dangers of photo voltaic systems in wildland fires are significant and should not be underestimated. The release of toxic chemicals, the risk of electric shock, and the continuous production of electricity pose serious challenges for emergency responders. [15]*

2.2 BESS Thermal Runaway: The Critical Danger

KFEC will include a utility-scale battery energy storage system (BESS). The NOI does not specify the storage capacity or battery chemistry, but utility-scale projects of 400 MW routinely include hundreds of megawatt-hours of lithium-ion battery storage. Lithium-ion batteries carry an inherent risk of thermal runaway — a self-sustaining chain reaction of heat and chemical release that can be extraordinarily difficult to stop. [16]

The EPA released new BESS safety guidelines in 2025 in direct response to two high-profile incidents: a seven-day fire at the Gateway Energy Storage Facility in San Diego, and a separate fire in Moss Landing, California that required the evacuation of 1,200 nearby residents. The

EPA's own guidelines acknowledge that lithium-ion battery fires can reignite hours or even days after initial suppression. The harmful gases released during thermal runaway events pose health risks to both responders and nearby residents.

The Oregon EFSC staff report on battery storage technology, issued May 2025, documents that 'battery facilities, especially Li-ion, carry a risk of thermal runaway and fire,' and also cites the Moss Landing facility in California — a 300+ MW system — which experienced overheating events in 2021-2022 and a thermal runaway event in 2024. The International Association of Fire Fighters (IAFF), in a report based on U.S. Department of Energy-sponsored testing, identifies the following specific hazards for first responders: **[18]**

- Rapid fire growth rate when lithium-ion batteries are involved
- Thermal runaway can occur in the absence of active visible fire
- Distinct white or gray gas clouds form low-hanging toxic plumes at ground level
- Structures must not be approached or entered when thermal runaway is suspected without pre-deployed, charged hose lines
- Water used on lithium-ion battery fires can exacerbate the reaction; specialized suppression agents are required

Critical Safety Finding: *Fire suppression systems for BESS rely on clean agents or inert gases rather than water. Lithium-ion battery fires are a fundamentally different hazard from structure fires or wildland fires, requiring specialized training and equipment that no rural volunteer fire department in Klamath County currently possesses.*

2.3 Critical Evacuation Route Vulnerabilities

County Highway 603 (Clover Creek Road) serves as the primary — and in many cases the only practical — evacuation route for Keno residents in the event of a wildfire or BESS-related emergency at the KFEC site. The road runs directly adjacent to the proposed project boundary and would be heavily impacted by construction traffic, potential fire spread, smoke, and debris.

In a wildfire scenario exacerbated by the project's clear-cutting of 8,600 acres of forest (creating new fuel arrangements and access roads), or during a lithium-ion BESS thermal runaway event, this corridor could rapidly become impassable due to flames, dense toxic smoke, fallen infrastructure, or emergency vehicle congestion. Many homes in Keno and along the route have limited or no secondary egress options, particularly during high-wind red-flag conditions common in the Klamath Basin.

The combination of increased ignition risk, limited firefighting resources, and reliance on a single vulnerable arterial creates an unacceptable life-safety hazard. The Keno Rural Fire

Protection District and Klamath County have not been shown to have adequate plans or infrastructure to guarantee safe evacuation under worst-case scenarios.

2.4 Toxic Plume and Atmospheric Dispersion Risks

In the event of a lithium-ion BESS thermal runaway fire, the facility would release a complex mixture of toxic gases and particulates, including hydrogen fluoride (HF), hydrogen cyanide (HCN), carbon monoxide (CO), volatile organic compounds, and other hazardous byproducts. These fumes pose immediate respiratory, ocular, and systemic health risks to first responders and nearby residents.

Prevailing winds in the Klamath Basin, which frequently blow from the northwest and west across the proposed KFEC site toward Keno and the Klamath River corridor, would carry these toxic plumes directly over the community. Low-lying topography and temperature inversions common in the Basin could cause the heavier gases and particulates to settle and concentrate in populated areas, residential zones, agricultural lands, and sensitive aquatic habitats. This risk is amplified during red-flag fire weather conditions when winds are strongest and atmospheric dispersion is poorest.

The Keno Rural Fire Protection District and local emergency planners have no documented modeling or mitigation plan for such plume dispersion scenarios. The Alliance demands that the applicant provide comprehensive, site-specific atmospheric dispersion modeling (using tools such as American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) or equivalent) that accounts for local topography, seasonal wind patterns, and worst-case BESS fire volumes. This modeling must identify exposure zones for Keno residents, schools, and the Klamath River system, with enforceable setbacks, notification protocols, and protective measures required as conditions of any Site Certificate.

2.5 Keno RFPD Capability Assessment

The Keno Rural Fire Protection District is a volunteer department of approximately twenty personnel covering 44 square miles. The district operates from four stations. It is a community-oriented, dedicated department with commendable wildland fire training, but it is not designed, staffed, or equipped to respond to a utility-scale BESS thermal runaway event. Such events involve extremely high heat, difficult-to-extinguish fires that can reignite for days, and the release of toxic gases.

The relevant capability questions are not a criticism of Keno RFPD's professionalism — they are a recognition of the structural mismatch between a volunteer rural fire district and a 400 MW industrial battery complex. Handling a fire of this magnitude would require specialized hazardous materials training, advanced personal protective equipment, large volumes of

specialized suppression agents (beyond standard water), thermal imaging, gas monitoring equipment, and coordinated mutual aid that may not arrive in time. A 20-person volunteer force cannot safely or effectively respond to an incident of this scale without substantial external support — support that may be delayed in a rural, forested area during a major event.

The closest municipality with meaningful resources and training to handle a large-scale lithium-ion BESS thermal runaway fire is Klamath Falls (approximately 15 miles east of Keno). Klamath Falls Fire Department (career/paid staff, not volunteer) has more personnel, larger apparatus, and better access to mutual aid.

They have hazardous materials (HazMat) response capabilities, though specialized BESS/lithium fire training and equipment are still limited even at this level. They can provide the first significant mutual aid to Keno RFPD. Even so, no rural fire district or even most mid-sized city departments in Oregon are fully equipped or regularly trained for a **utility-scale BESS fire** (hundreds of MWh). These incidents are rare and require:

- Massive volumes of specialized suppression agents.
- Advanced toxic gas monitoring.
- Long-duration operations (fires can burn/reignite for days).

Response time from Klamath Falls to the KFEC site would be 20–40+ minutes depending on traffic, weather, and exact location on the large site — potentially too slow for initial containment. Larger departments in Medford (Ashland/Medford area, ~70–80 miles) or Bend have more advanced HazMat teams, but response times would be 1.5–2+ hours. State or federal resources (Oregon State Fire Marshal, federal wildfire teams) could be called in but are not immediate.

Specific Questions the Applicant Must Answer:

- ***What fire suppression system will be utilized for a utility-scale BESS thermal runaway at KFEC?***
- ***What wildfire suppression plan will be utilized in addition to the BESS fire suppression system?***
- ***What volume of water (in gallons) would be required to suppress a wildfire at KFEC, and what permanent on-site water supply infrastructure will be constructed and maintained to meet this requirement?***
- ***Has the applicant obtained a formal written assessment from Keno RFPD Chief David Blair regarding the district's capability to suppress a utility-scale BESS thermal runaway at KFEC?***

- ***Will the applicant fund, train, and fully equip Keno RFPD with the specialized BESS response equipment — including Class D suppression agents, full HazMat PPE, and thermal imaging devices — before the facility begins operation?***
- ***What is the minimum expected fire department response time from Keno Station #4 at the junction of Dead Indian Memorial Highway and Clover Creek Road to the farthest point of the KFEC site boundary? What is the response time from the nearest mutual aid partners?***
- ***What are the planned procedures for red flag warning days? Will the BESS be shut down or de-energized when Oregon Department of Forestry issues red flag conditions? Who makes that decision and under what protocol?***
- ***What evacuation routes exist for homes on Clover Creek Road, Aspen Lake Road, and other roads adjacent to the site? Has an evacuation route analysis been performed acknowledging that Clover Creek Road is the primary egress and would be most threatened in a fire scenario?***
- ***What secondary/emergency egress improvements will be funded? How will construction traffic guarantee emergency access 24/7?***
- ***What toxic gas plume modeling has been done for a worst-case BESS fire? What are the downwind exposure zones for hydrogen fluoride, hydrogen cyanide, carbon monoxide, benzene, and other thermal runaway off-gases? At what wind speeds and directions does the plume reach Keno?***
- ***Are local firefighters trained and equipped for BESS response? If not, who is contractually responsible for providing that training and equipment before the facility operates, and what is the ongoing training commitment?***
- ***What homeowner insurance implications will KFEC create for Keno-area residents? Has the applicant commissioned an independent actuarial assessment of fire risk impact on property insurance availability and pricing in the vicinity?***

The Klamath Tribal Councilor Les Anderson offered direct, experiential testimony at the February 2026 community meeting:

“We have a little solar farm out in Chiloquin that burns about every summer, because it gets hot. So the need for water is immense.”

This testimony from a community member with direct local knowledge of solar facility fire behavior in Klamath County's climate should be treated as primary evidence in the EFSC review.

“These are, candidly, you know, dry, low-productivity timberlands. There are really pretty limited ways to manage them to be kind of in keeping with our guiding principles.” - Dave Walters, Vice President of Acquisitions and Business Development for Green Diamond [60]

III. Water: Wells, Drainage, Wetlands, Runoff, and Fish Habitat

This section addresses the EFSC review areas of Water, Fish and Wildlife, and Threatened and Endangered Species.

3.1 Groundwater and Domestic Wells

Keno residents depend almost entirely on private wells for domestic water supply. There is no municipal water system serving the unincorporated community. These wells draw from groundwater aquifers recharged by snowpack percolating through the forested uplands directly north of town — the same uplands that comprise the KFEC site.[24][25][26]

The hydrology of this relationship is well established in scientific literature. A 2025 review in the Journal Hydrology found that deforestation reduces infiltration and groundwater recharge while increasing surface runoff, and significantly alters the chemistry of both surface water and groundwater. The research found that runoff increases while infiltration and groundwater recharge decrease following forest removal — exactly the outcome that would result from clearing thousands of acres immediately upslope from Keno's water supply.[26]

Furthermore, research published in the Journal of Umm Al-Qura University found that heavy construction machinery compacts soils during installation and maintenance of large solar arrays, lowering permeability and reducing the rate of groundwater recharge beyond what deforestation alone causes. A study reviewing hydrological impacts of large-scale solar farms confirmed that ground-mounted photovoltaic systems can alter groundwater quality and infiltration rates — and may affect water quality through the dilution of impaired groundwater.[25]

Klamath Tribes Chairman William E. Ray Jr. spoke directly to this concern at the February 2026 community meeting: 'Projects like this are likely to impact the headwaters, drying up streams by reducing the recharge of the groundwater.' He referenced the already-declining snowpack — from the 6-8 feet his parents knew in their youth to today's dramatically reduced levels — as evidence of an ecosystem already under stress and ill-equipped to absorb further disruption.

A far more acute risk arises from potential BESS fires. Lithium-ion battery thermal runaway events release a cocktail of toxic compounds, including **lithium**, **heavy metals** (cobalt, nickel, manganese), **PFAS** (“forever chemicals”), hydrogen fluoride, and other hazardous substances. Fire suppression water used on these events can become highly contaminated and, if not fully contained, can infiltrate the soil and migrate into the aquifer. Given the site’s location directly

upslope from Keno's wells and Klamath River tributaries, such runoff poses a direct and potentially long-lasting threat to domestic drinking water supplies and critical salmon habitat.

These contaminants are persistent and difficult to remediate once they reach groundwater. The Klamath Basin's hydrology makes downward migration particularly concerning during periods of high recharge.

Key Water Concern: *Keno residents who purchased homes with functioning private wells relying on forest-recharged groundwater have a legally cognizable interest in the maintenance of the hydrological conditions that support those wells. KFEC's 8,600-acre clear-cut poses a direct, documented threat to those conditions.*

Well Logs and Baseline Data Required:

Affected landowners are encouraged to submit well logs and historical water-level records as formal evidence in the EFSC proceeding. The applicant must demonstrate, through peer-reviewed hydrological modeling, that clearing thousands of acres of forested land will not reduce groundwater recharge rates in the formations supplying existing domestic wells within a minimum 5-mile radius of the project boundary.

3.2 Surface Drainage, Wetlands, and Runoff

The KFEC NOI acknowledges the site boundary sits north of the Klamath River, south of Aspen Lake, east of Oatman Lake and west of Round Lake. These named water bodies are not incidental recreational features — they are part of the broader Klamath Basin hydrological system. The project site is, by definition, in a watershed that drains to the Klamath River.

Solar panel arrays intercept precipitation and concentrate runoff in inter-panel rows, altering natural infiltration patterns. A 2022 peer-reviewed study of solar farm hydrology found that solar panels have the potential to alter multiple meteorological properties and hydrological processes, including redistribution of soil moisture and changes in runoff patterns.

Construction-phase disturbance — grading, grubbing, road building, and foundation installation — can generate significant sediment loads unless controlled by best-management practices.**[22]**

The Resources for the Future analysis of forest-to-solar conversions in Georgia found that changes in local hydrology due to conversion of forestland to solar facilities have diminished water quality and, in at least one case, resulted in regulatory fines for water quality violations. Klamath County stakeholders have every reason to expect similar outcomes here unless the applicant can demonstrate with site-specific data that it will not occur. **[30]**

3.3 Microclimate and Local Environmental Changes

Large-scale solar development on cleared forest land significantly alters the local microclimate. Solar panels have a much lower albedo (reflectivity) than natural forest or grassland, causing greater absorption of solar radiation and conversion to heat. Studies of utility-scale solar facilities show reduced evapotranspiration due to vegetation loss and shading patterns, leading to changes in soil moisture, local humidity, and surface temperatures.

Notably, while daytime cooling can occur in some settings, nighttime temperatures over solar arrays are often several degrees warmer than surrounding wildlands due to stored heat release. These shifts can modify wind patterns, frost timing, snowmelt rates, and overall moisture regimes in the project area. For the KFEC site, such microclimate alterations would occur directly upslope of the Klamath River and its tributaries, potentially stressing the cold groundwater inputs that make this habitat climate-resilient for threatened coho salmon and steelhead. Warmer water temperatures and altered hydrology could degrade spawning and rearing conditions for anadromous fish at a critical time in Klamath River restoration efforts.

Documentation Residents Should Provide to EFSC:

- Photographs of drainage patterns and seasonal flooding on Clover Creek Road and adjacent properties
- Photographs of wetland areas and spring seeps within or adjacent to the KFEC site boundary
- Snowpack observation records and seasonal runoff observations from local landowners
- Historical well log data and water table readings from registered wells
- Any documentation of stream or spring conditions that may constitute waters of the state

3.4 Threatened and Endangered Fish: Coho Salmon, Steelhead and the Klamath Restoration

The KFEC project is sited at a moment of extraordinary ecological significance for the Klamath River. The removal of four large dams on the Klamath in 2023-2024 represented the largest dam removal in U.S. history and reopened more than 400 miles of river to anadromous fish for the first time in over a century. NOAA Fisheries and the U.S. Fish and Wildlife Service confirm that the Klamath River supports Chinook salmon, threatened Coho salmon, and Steelhead trout populations, and that excellent habitat awaits above both Keno and Link River dams in tributaries feeding Upper Klamath Lake. **[12]**

Trout Unlimited has installed more than fifty temperature gauges and ten groundwater wells throughout the upper Klamath watershed. The Oregon portion of the Klamath River Basin contains much of the basin's climate-resilient cold-water habitat, sustained by numerous groundwater inputs. Clear-cutting thousands of acres of forested upland immediately north of the Klamath River threatens these cold groundwater sources that help keep the habitat suitable for recovering salmon and steelhead populations.[38]

Research confirms that improperly managed forest removal increases sediment in streams, increases solar radiation reaching stream surfaces (raising stream temperatures), degrades riparian cover, and degrades stream habitat through networks of unpaved construction roads. All of these stressors are directly applicable to KFEC construction and operation. Given that threatened Coho salmon in the Klamath River are federally protected under the Endangered Species Act, any project that materially harms their habitat triggers Section 7 consultation requirements with NOAA Fisheries — a process the NOI does not appear to have initiated.

Specific Questions for EFSC Review:

- ***Has the applicant initiated formal Section 7 ESA consultation with NOAA Fisheries regarding impacts to threatened Klamath River coho salmon from KFEC-related changes to watershed hydrology and stream temperature?***
- ***Has the applicant obtained written comments from ODFW regarding impacts to the recently restored Klamath River salmon and steelhead populations from upland deforestation at the KFEC site?***
- ***What site-specific hydrological modeling demonstrates that construction and operation of KFEC will not increase sediment loading, stream temperatures, or reduce cold groundwater inputs to Klamath River tributaries?***
- ***What permanent on-site containment, treatment, and monitoring systems for fire suppression water will be constructed and maintained?***
- ***Will the applicant fund baseline and ongoing groundwater monitoring for these specific contaminants before, during, and after operations?***

“We must protect the forests for our children, grandchildren and children yet to be born. We must protect the forests for those who can’t speak for themselves such as the birds, animals, fish and trees.” – Qwatsinas (Hereditary Chief Edward Moody), Nuxalk Nation

IV. Wildlife Corridors: Mule Deer, Elk, Wolves, Birds, and Habitat

This section addresses the EFSC review areas of Fish and Wildlife, Threatened and Endangered Species, and Protected Areas.

4.1 The Keno Mule Deer Herd: A Named, Scientifically Documented Population

The KFEC site is not generic forest land. It sits at the center of the documented winter range and spring migration corridor of the Keno Mule Deer herd — a population sufficiently distinct that the U.S. Geological Survey Corridor Mapping Team has produced dedicated datasets mapping its winter ranges and migration routes. The USGS describes this herd's winter range as occurring precisely between Oregon Route 66 and the Oregon-California border along the slopes of the Cascade Range — the exact landscape KFEC proposes to transform.^{[9][10]}

According to the USGS dataset, the Keno mule deer herd winters in oak woodland with mixed-conifer, ponderosa pine, and early shrub-tree forests at higher elevations — the forest types that characterize the KFEC site. In spring, deer migrate north across Oregon Route 66 to forested summer ranges higher along the eastern slope of the Cascade Range. Clearing 8,600 acres of this landscape severs the migration corridor and eliminates winter range for this herd.

A residential population of *Odocoileus hemionus columbianus* (black-tailed deer) also inhabits the Keno region, and the USGS data acknowledges that Keno mule deer compete for resources with elk during severe drought periods. ^[11]

The Keno area also intersects with documented East Shasta Valley Rocky Mountain elk migration corridors and winter ranges developed by CDFW and ODFW using GPS collar data. High-use elk corridors in this region were used by 20 percent or more of collared animals sampled, indicating the KFEC site lies within a regionally critical wildlife movement zone. Among the elk using these corridors is the Roosevelt elk (*Cervus canadensis roosevelti*) herd. Roosevelt elk, the largest subspecies of elk in North America, rely on the dense forest cover, riparian areas, and forage in the Klamath Basin and southern Cascade foothills for winter range, calving, and seasonal movement. The proposed project area overlaps with documented high-use corridors and wintering grounds for these elk, which compete with mule deer for resources during harsh

winters and drought periods. GPS collar data from ODFW and CDFW show that these corridors are used by a significant percentage of the local population. Permanent conversion of forest to industrial solar infrastructure would fragment habitat, increase mortality from vehicle collisions during migration, restrict access to water sources, and degrade forage quality.

USGS Finding: *The landscapes that migrating herds traverse are increasingly threatened by fencing, high-traffic roads, energy development, and other types of permanent development. USGS mapping has directly identified KFEC's landscape as critical to the Keno mule deer herd.*

4.2 Wolves and Apex Predators

Oregon's recovering wolf population uses the Klamath region's forests. This is not conjecture: during the October 2025 ODFW review of the smaller Diamond Solar project, ODFW district wildlife biologist Mike Moore disclosed that field work had documented a wolf kill of a collared deer on the project's edge.^[59] Wolves require large undisturbed forest landscapes to maintain viable territories. A project that eliminates thousands of acres of forested habitat will degrade or eliminate wolf territory in this portion of the southern Cascades.

4.3 Birds: Migratory Species and the Lower Klamath National Wildlife Refuge

The KFEC NOI acknowledges the site is approximately 10 miles from both the Lower Klamath National Wildlife Refuge and the Upper Klamath National Wildlife Refuge — both of which provide habitat for migrating waterfowl. The Klamath Basin has historically supported some of the largest waterfowl concentrations in the Pacific Flyway. Research published in the journal *Animals* (MDPI) confirms that solar panel surfaces attract waterbirds through the polarized light reflection phenomenon, and that construction disturbance can exclude native species and create unsuitable environments for migratory stopovers.

A scientific review published in *Renewable and Sustainable Energy Reviews* confirms that utility-scale solar facilities impact fauna through habitat loss and fragmentation, altered microclimate, and creation of novel habitat, with the study finding that waterbirds are specifically attracted to polarized light from panels — a phenomenon that leads to bird mortality at large solar facilities. At KFEC's scale — an estimated one million solar panels — these impacts could be measurable at the population level for waterfowl using the Klamath refuges.^[29]

Additionally, The Nature Conservancy's 2024 analysis of solar energy development found that in three of five development scenarios, up to one percent of remaining deciduous forest in the continental U.S. could be lost to solar conversion. It further cited that forest land containing land covers (with higher value for animal movement) are being converted to solar at higher

rates than low-value land covers. The Keno forest, just 10 miles from two federal wildlife refuges, falls squarely in the high-value wildlife movement category. [28]

Specific Questions for EFSC Review:

- *Has the applicant submitted a comprehensive wildlife survey identifying all species using the KFEC site, including GPS-collared deer and elk from ODFW's Keno herd and East Shasta Valley elk datasets?*
- *Has ODFW formally reviewed and approved the applicant's wildlife impact assessment for the Keno mule deer herd and East Shasta Valley elk? ODFW's 2025 finding that the Diamond Solar site's habitat value was 'underrepresented' by its developer should be applied as a baseline standard of skepticism here.*
- *What is the applicant's plan for fencing? Will the entire 8,600-acre perimeter be fenced? What type of fencing is proposed, and has it been reviewed by ODFW for wildlife compatibility and passage?*
- *What specific mitigation is proposed for the polarized light hazard to waterfowl given proximity to two National Wildlife Refuges?*
- *Has the applicant conducted or reviewed comprehensive surveys identifying Roosevelt elk usage, including GPS-collared data from ODFW and CDFW for the East Shasta Valley and Keno area herds?*
- *What specific mitigation measures (e.g., wildlife-friendly fencing, underpasses/overpasses, or habitat offsets) are proposed to maintain connectivity for both mule deer and Roosevelt elk migration corridors?*
- *How will the project address cumulative impacts on elk and deer from habitat loss combined with increased human activity and road traffic?*
- *What site-specific microclimate modeling (including albedo changes, evapotranspiration, daytime/nighttime temperature differentials, and impacts on wind/moisture patterns) has the applicant performed?*
- *How will the project avoid or mitigate adverse effects on cold-water refugia and stream temperatures in Klamath River tributaries?*
- *Has the analysis accounted for cumulative microclimate impacts from the solar array combined with forest clear-cutting on 8,600 acres?*

V. Traffic, Road Damage, and Emergency Access

This section addresses KCLDC road standards, traffic impact study requirements, and the EFSC review area of Public Services.

5.1 Construction Traffic on County Highway 603

The primary access route to the KFEC site is County Highway 603 (Clover Creek Road), a two-lane rural county road that currently accommodates agricultural vehicles, logging trucks, and local residential traffic. Construction of a 400 MW solar facility on 8,600 acres will require the delivery of an estimated one million solar panels, hundreds of battery storage units, transformer equipment, structural steel, concrete, and gravel — each requiring heavy truck transport. Comparable large-scale solar projects generate hundreds of heavy truck trips per day during peak construction phases.

County Highway 603 was not engineered or maintained for sustained heavy industrial use. Unlike state highways, rural county roads in Oregon's forested regions are typically designed to limited load ratings, and repeat passage of overloaded or oversized trucks causes damage disproportionate to the number of trips. The existing logging truck use of these roads does not constitute a baseline that industrial solar construction traffic is compatible with — logging operations are seasonal and distributed across large networks; KFEC construction will concentrate traffic on a single corridor for the 20-22 months projected for construction.

Critically, County Highway 603 is also the only practical evacuation route for residents of Keno in the event of a wildfire or BESS emergency at the KFEC site. Construction traffic blocking or damaging this road during emergency conditions could trap residents. The Klamath County Land Development Code requires traffic impact studies for major development proposals, and this requirement must be rigorously enforced for KFEC.[6]

Documentation Residents Should Submit:

- Current road condition photographs of County Highway 603 and other access roads, dated and geolocated
- Photographic or video documentation of existing logging truck damage to road surfaces
- Written statements documenting current road conditions from frequent users
- Maps showing the locations of residences along the evacuation corridor and their distance from the KFEC access point

Specific Questions for EFSC Review:

- ***What is the current structural load rating of County Highway 603, and what engineering analysis demonstrates it can support KFEC construction traffic without requiring reconstruction?***
- ***Who will pay for road damage caused by KFEC construction vehicles? Has the applicant offered a road use agreement with Klamath County establishing pre-construction baseline conditions and a performance bond covering repair costs?***
- ***What is the peak-day truck trip generation estimate for KFEC construction, and what traffic control measures are planned to maintain emergency vehicle access throughout the construction period?***
- ***What are the dimensions and weight ratings of the battery storage modules and transformer equipment? Do any loads require special permits or escorts that would require coordination with ODOT and Klamath County?***
- ***Has the applicant complied with KCLDC traffic impact study requirements as a condition of this application?***

5.2 Logging Trucks and Competing Road Uses

Green Diamond Resource Company — the landowner — continues to harvest timber from surrounding lands. The KFEC construction period will coincide with continued logging operations using the same road network. The cumulative impact of logging and solar construction traffic has not been addressed in the NOI. Klamath County must require a coordinated traffic management plan that addresses this overlap before any Site Certificate is issued.

VI. Noise: Construction, Operations, Inverters, Substations, and BESS

This section addresses the EFSC review area of Noise and KCLDC noise compatibility standards.

6.1 Construction Noise

Construction noise from utility-scale solar projects is estimated at approximately 75 dBA at 50 feet during active phases, equivalent to a running lawn mower at close range. For context, Keno's ambient background noise levels are likely in the range of 25-30 dBA — the sound of a quiet forest. This is per OAR 340-035-0035(1)(b)(B)(iii)(I) — which explicitly authorizes the assumed rural/background L50 ambient of 26 dBA for solar (and wind) facilities. Construction activity will generate noise levels audible throughout the community, including from pile drivers, heavy equipment, and generator sets, for the projected 20-22 month construction period. Residents near the project boundary will experience persistent noise that disrupts daily life, disrupts sleep, and reduces the rural quality of life that led them to settle in Keno.

6.2 Operational Noise: Inverters, Transformers, and Substations

Large-scale solar projects generate ongoing operational noise from several sources:

KFEC Operational Noise Sources and Typical Levels
String/central inverters: 40–70 dBA at 3 feet; declines to ~35–40 dBA at 100 feet
Substation transformers: 40 dBA at 6 feet depending on voltage class; audible to ~2,000 feet in quiet conditions
Cooling fans on BESS containers: continuous mechanical noise during operation
Tracking motors on single-axis solar trackers: intermittent mechanical noise throughout daylight hours
HVAC systems for battery enclosures: 24/7 operation

A noise analysis conducted for a comparable Washington state solar facility found that the 40 dBA noise contour from substations extends approximately 2,000 feet at the noisiest location. In addition to inverters, transformers, and tracking motors, the battery energy storage system (BESS) will generate continuous mechanical noise from HVAC cooling units, fans, and thermal

management systems required to maintain safe operating temperatures for the lithium-ion batteries. These systems often operate 24/7, including at night, to prevent overheating and thermal runaway risks.

In the quiet rural setting of Keno, where ambient background noise levels are typically 25–30 dBA, the low-frequency hum and fan noise from BESS cooling equipment can propagate significant distances. Comparable facilities show that BESS cooling noise can remain audible well beyond 1,000 feet, particularly under temperature inversions common in the Klamath Basin. This would constitute a persistent industrial intrusion for nearby residences, disrupting sleep, wildlife behavior, and the rural quality of life that defines the Keno community.

In rural settings where background levels are 25-30 dBA, even a 40 dBA operational noise level represents a 10-15 dBA increase — more than three times louder than background. Because rural ambient noise is so low, operational noise from KFEC's substation and BESS facility will likely be audible from residences that have never experienced industrial operational noise.

A University of Louisiana at Lafayette acoustic study of solar facility noise notes that 'recognition that existing ambient noise levels are commonly quiet in rural areas where energy facilities would likely be sited' should govern noise standards. An increase of 5 dBA over ambient is considered significant, and KFEC's substation alone may generate increases of 15-20 dBA at residences within half a mile of the facility boundary. [31]

Specific Questions for EFSC Review:

- ***What site-specific noise modeling has been performed for KFEC's substation, inverters, and BESS cooling equipment at all residential receptors within 2 miles of the facility boundary?***
- ***Does the proposed facility comply with Oregon Environmental Quality Commission Noise Control Regulations (OAR 340-035) at all affected residential properties? If not, what mitigation is proposed?***
- ***Does the project comply with any applicable KCLDC noise standards for development in forest zones adjacent to residential uses?***
- ***What are the nighttime noise levels from BESS HVAC and cooling systems at the nearest residence, and do they comply with applicable nighttime standards?***
- ***What noise mitigation measures (e.g., barriers, mufflers, or equipment specifications) will be implemented, and will they be effective under varying wind and atmospheric conditions?***

VII. Land Use Compatibility and Regulatory Compliance

This section addresses the EFSC review areas of Land Use and Protected Areas, and specifically examines KCLDC compliance requirements.

7.1 Oregon Goal 4: Forest Lands Protection

Oregon's Statewide Planning Goal 4 exists to protect forest lands from incompatible uses. Klamath County's Comprehensive Plan implements Goal 4 through two forest zones (Forest and Forest/Range) with explicit policies including: 'to preserve forest land for forest uses,' 'to prevent loss of existing forest uses,' and 'to reduce fire danger to man-made structures and forest resources.' The Klamath County Comprehensive Plan's Goal 4 policies designate the type of land encompassing the KFEC site — 'public or private industry forest lands located contiguously in large blocks' — as requiring protection.

The KFEC proposal requires not merely a conditional use permit but a formal exception to Goal 4 — an acknowledgment that the project is precisely the type of use the state's land use system was designed to prevent. Such exceptions require extraordinary findings and substantial evidence.

7.2 KCLDC Conditional Use Requirements

Under the Klamath County Land Development Code, a conditional use permit in a forest zone requires demonstration that the proposed use is compatible with adjacent forest operations, does not unreasonably restrict the use of surrounding forest land, and meets standards for access, fire protection, and site design. KFEC must demonstrate compliance with each of the KCLDC standards.

7.3 Oregon HB 3179 (2023): Solar Siting Reform

Oregon's 2023 solar siting reform legislation (HB 3179) changed permitting thresholds and established new standards for solar development. KFEC exceeds the EFSC jurisdiction threshold, requiring a Site Certificate. ODFW's 2024 Solar Siting Guidance establishes specific wildlife standards applicable to the EFSC pathway, requiring project proponents to conduct impact assessments, develop mitigation plans, and comply with Oregon's Fish and Wildlife Habitat Mitigation Policy. The NOI does not demonstrate compliance with these requirements.

Specific Questions for EFSC Review:

- ***Does the application demonstrate compliance with all KCLDC conditional use, road, traffic, drainage, and archaeological standards?***
- ***What Goal 4 exception findings are made?***

VIII. Cultural, Archaeological, and Tribal Resource Concerns

This section addresses the EFSC review area of Cultural Resources.

8.1 The Klamath-Modoc Archaeological Landscape

The area surrounding Keno has one of the richest documented archaeological records in Southern Oregon. PacifiCorp's Klamath River hydroelectric relicensing cultural resources exhibit — the most comprehensive archaeological survey of the upper Klamath region on record — specifically identifies the Keno Pictographs (35KL1901) as a significant rock art site located in the Upper Klamath River Canyon near the town of Keno. This site includes a diverse collection of images believed to demonstrate regional interactions between Klamath/Modoc and Shasta peoples. The KFEC site is in the same cultural landscape. [19]

The Klamath Tribes' Culture and Heritage Department operates a site protection program that provides 'protection to ancestral and sacred sites and landscapes in cooperation with federal, state and local land management agencies, private developers and land owners.' No documentation in the NOI indicates that Ørsted has engaged in formal government-to-government consultation with the Klamath Tribes under the requirements applicable to major EFSC-regulated projects.

Comparable EFSC applications in other parts of Oregon have disclosed significant findings during cultural resource surveys, including sites eligible for the National Register of Historic Places and areas of religious or cultural significance to Indian tribes (HPRCSITs). For example, the Sunstone Solar Project application for Morrow County disclosed two HPRCSITs overlapping the facility boundary, leading to Confederated Tribes of the Umatilla Indian Reservation recommendations for monitoring. The KFEC NOI contains no equivalent disclosure, suggesting that adequate surveys have not yet been conducted.

8.2 Traditional Tribal Land Uses and Treaty Rights

The Klamath Tribes have treaty-protected rights to hunt, fish, and gather throughout their traditional territory, which encompasses the KFEC project area. The Klamath Tribes' Chairman William Ray, Jr. noted at the February 2026 community meeting:

“We're concerned about all of these projects... We all have a tie to this land. We've been here for a long time, since the beginning of time.”

The removal of 8,600 acres of forest that supports deer, elk, fish, and traditional plant gathering would directly impair the exercise of these treaty-protected rights. A full consultation and impact analysis must precede any Site Certificate.

Specific Questions for EFSC Review:

- ***Has a Phase I Archaeological Survey been conducted for the entire 8,600-acre KFEC site boundary, and have the results been submitted to the Oregon State Historic Preservation Office (SHPO)?***
- ***Has the applicant initiated formal government-to-government Section 106 consultation with the Klamath Tribes regarding potential impacts to traditional cultural properties, sacred sites, and areas of religious significance within and adjacent to the KFEC site?***
- ***Has the applicant conducted an ethnographic study with the Klamath Tribes to identify traditional land uses, gathering sites, hunting areas, and spiritually significant locations within the project area?***
- ***What are the applicant's protocols for inadvertent discovery of human remains or cultural artifacts during the approximately 20-22 months of ground-disturbing construction?***
- ***The Keno Pictographs are documented within the broader Keno cultural landscape. Has the applicant assessed whether KFEC construction and operation activities would affect the viewshed or acoustic environment of this NRHP-eligible site?***

IX. Public Services: Fire, Law Enforcement, Medical, and Housing

This section addresses the EFSC review area of Public Services.

9.1 Fire Protection Capacity Gap

As detailed in Section II, Keno RFPD is a volunteer department of approximately twenty personnel covering 44 square miles with four stations. At its peak, KFEC's construction workforce is projected to exceed 150 workers. The permanent operational workforce is unspecified in the NOI, but comparable facilities typically require 10-20 full-time operations staff and ongoing maintenance crews. None of this additional population has been analyzed in terms of its incremental impact on fire service demand.

More critically, the KFEC facility itself represents an entirely new category of emergency response demand — utility-scale BESS thermal runaway events — that Keno RFPD is not currently equipped or trained to handle. The Klamath County Community Wildfire Protection Plan (CWPP) has not been substantively updated since 2016 and is still pending as of August 2026. KFEC should not receive a Site Certificate before the CWPP is updated to specifically address the BESS fire risk profile that KFEC introduces.

9.2 Grid Capacity and Transmission Infrastructure Limitations

Beyond local emergency services, the project also raises questions about regional transmission readiness.

KFEC plans to connect to PacifiCorp's existing Klamath CoGen–Meridian 500 kV transmission line. PacifiCorp's own interconnection studies for similar large solar-plus-storage projects on this same line have repeatedly shown that major upgrades will be needed. These typically include rebuilding or reinforcing multiple 230 kV lines, expanding substations, adding series capacitors, and related work to prevent overloads and voltage problems when the solar facility is producing at full output.

The cost of these shared network upgrades commonly runs into the tens of millions of dollars, with each project expected to pay a proportional share. An earlier project already in the queue—Diamond Solar (approximately 200 MW solar plus storage)—will use some of the available capacity on related lines. Once its upgrades are counted as complete, less headroom remains for a 400 MW facility like KFEC.

PacifiCorp is also planning a larger regional solution known as Blueprint South: a proposed 180-mile 500 kV transmission line through south-central Oregon, including Klamath County. While

this line could eventually help, it is still in the early planning and routing stages. It is not guaranteed to be finished in time for KFEC's projected 2032 start date.

Approving KFEC without clear, concurrent transmission solutions therefore creates real risks of generation curtailment, reduced grid reliability, and the possibility that additional upgrade costs will fall on ratepayers. The Alliance is concerned that the local grid and Klamath County residents would bear these burdens if the transmission pieces are not firmly in place before construction begins.

9.3 Cumulative Impacts and Track Record of Solar Development in Klamath County

Klamath County is already experiencing a wave of utility-scale solar proposals. Approximately ten solar projects have been announced or are in various stages of development in recent years. However, only a small number (roughly three) are currently online and operational. Many others remain in permitting, face delays due to grid constraints, environmental reviews, or financing challenges, or have been significantly scaled back.

This track record demonstrates that large solar developments in the region often take far longer than projected to deliver promised energy benefits, while still imposing immediate and long-term impacts on forest lands, wildlife, water resources, and rural communities. Approving the 8,600-acre KFEC project — by far the largest proposed to date — without fully addressing the cumulative effects of multiple facilities would compound these issues and further strain local infrastructure and services before the benefits of existing projects are realized.

9.4 Law Enforcement and Medical Services

Klamath County Sheriff's Office serves Keno, with the nearest station in Klamath Falls, 15 miles away. Construction of a 150-plus person workforce camp adjacent to a community of approximately 2,000 residents will increase demands on law enforcement. Similarly, medical emergencies — both routine construction injuries and BESS-related toxic exposure events — will strain the regional EMS system, which is already stretched thin in this rural county.

9.5 Housing and RV Park Strain

Keno has extremely limited rental housing stock. A 150-worker construction crew will require housing for the full 20-22 month construction period. If Ørsted establishes a temporary worker camp, this must comply with applicable county land use permits and sanitation standards. If workers seek housing in Keno and Klamath Falls, the impact on an already-tight rural housing market will be significant. Keno's existing RV parks and campgrounds — a significant part of the

local recreation economy — may be displaced or adversely affected by construction worker occupation.

Specific Questions for EFSC Review:

- *What studies demonstrate that the existing PacifiCorp grid can reliably accommodate 400 MW of intermittent solar generation plus BESS output without significant curtailment or reliability issues?*
- *How does the project timeline coordinate with PacifiCorp's Blueprint South transmission upgrades, and what contingency plans exist if those upgrades are delayed or rerouted?*
- *Will the applicant fund any necessary local grid reinforcements or upgrades required specifically for KFEC interconnection?*
- *What analysis has been conducted on the cumulative environmental, grid, and community impacts of all proposed and approved solar projects in Klamath County?*
- *Given that only a fraction of announced projects are currently operational, what assurances exist that KFEC will not result in stranded infrastructure or unmitigated harms if similar delays occur?*
- *How many construction workers will be employed at peak, how long will peak employment last, and where will they be housed?*
- *What financial contribution will the applicant make to Keno RFPD, Klamath County Sheriff's Office, and regional EMS to offset increased public safety costs during both construction and operations?*
- *Has the applicant prepared a Public Services Impact Assessment addressing each of these services, as required by EFSC's public services review area?*

X. Decommissioning, Financial Assurance, and Who Pays if the Project Fails

This section addresses the EFSC review area of Retirement/Financial Assurance — one of the most consequential and underappreciated issues in large-scale solar siting.

10.1 The Scale of the Decommissioning Problem

A 400 MW solar facility on 8,600 acres will involve an estimated one million solar panels, hundreds of battery storage units, miles of underground cabling, dozens of inverter pads and transformer foundations, an extensive road network, perimeter fencing, and a substation. When this facility reaches the end of its operational life — or if it is abandoned, sold to a financially weak successor, or rendered uneconomic by technological change — the cost of removing all equipment and restoring the land will be enormous.

Industry experts note that decommissioning costs for large solar facilities can reach millions of dollars, and that without enforceable financial assurance, these costs fall on the landowner or, ultimately, the public. A 2024 industry analysis warned bluntly that even strong companies may not survive 30 years to meet decommissioning obligations — leaving Klamath County potentially stuck with what analysts call an abandoned solar farm.

10.2 Oregon's Current Financial Assurance Framework and Its Gaps

For EFSC-jurisdictional facilities such as KFEC, the controlling standard is OAR 345-022-0050 (Retirement and Financial Assurance). The Council must find that the site can be restored to a useful, non-hazardous condition and that the applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council. Under the mandatory condition in OAR 345-025-0006(8), the certificate holder must submit that bond or letter of credit before beginning construction and must maintain it in effect at all times until the facility is retired. The Council may set different amounts for the construction and operating phases, but Oregon law does not impose a statutory tiered ramp-up of coverage. HB 3179 (2023) strengthened decommissioning-plan and bonding requirements for certain mid-sized solar projects permitted by counties; it does not create a statewide 5%/50%/100% schedule and does not alter the EFSC standard that applies to KFEC.

The practical gaps remain significant. The amount of the bond or letter of credit is determined case-by-case and can be set too low if scrap value is overestimated or if restoration costs (including reforestation of former timberland) are understated. Parent company guarantees are sometimes proposed; a parent guaranty from Ørsted — a foreign corporation subject to Danish

law whose financial position can change over a 30-year project life — does not provide the same security as a surety bond or irrevocable letter of credit held directly for the benefit of the State of Oregon. Transfer of the project to an undercapitalized successor can further erode protection unless the Site Certificate contains strong, enforceable conditions preventing such transfers without renewed financial assurance.

10.3 Reforestation: Can the Forest Be Restored?

Once 8,600 acres of forest are clear-cut and graded for industrial use, the prospect of meaningful reforestation within any practical planning horizon is remote. Research published in the *Journal of Cleaner Production* found that the capacity factor of solar farms in deforested areas remains lower than on open land for approximately 36 years following deforestation — suggesting that even the solar energy rationale does not improve over time. And a 30-year solar facility life means the site will not be available for reforestation until roughly 2062. Any reforestation commitment in the Site Certificate must be legally binding, financially secured, and subject to independent monitoring.

10.4 Landowner Responsibility: Green Diamond Resource Company

Green Diamond Resource Company owns the land in fee and proposes to lease a portion of it to Klamath Falls Energy Center, LLC (Ørsted) under an option agreement that, if exercised, will become a long-term solar lease. Green Diamond has publicly stated that it will maintain fee ownership, will not be involved in planning, development, or operations of the project, and that its agreement with Ørsted “imposes site restoration requirements.” Green Diamond further states that “the land will be returned to a working forest” at the end of the lease.

Under EFSC rules, the certificate holder — not the landowner — is the party required to post the bond or letter of credit and to restore the site to a useful, non-hazardous condition (OAR 345-022-0050 and OAR 345-025-0006(8)–(9)). If the certificate holder defaults, becomes insolvent, or transfers the project to an undercapitalized entity, the State of Oregon can draw on the bond or letter of credit. That mechanism, however, protects the State’s interest; it does not automatically make the landowner whole, nor does it guarantee that the site will be restored to productive forest capable of supporting the hydrological, wildlife, and cultural values the Alliance has identified.

As the fee owner that is voluntarily converting industrial timberland to a multi-decade industrial energy use, Green Diamond retains both practical and moral residual responsibility for the condition of its land. Sophisticated solar leases routinely require the lessee to (1) fully decommission and restore the property, (2) post a decommissioning bond or letter of credit for the benefit of the landowner in addition to any regulatory security, and (3) make those

obligations survive default or bankruptcy. The public interest in watershed function, wildlife connectivity, and eventual return of the land to forest use is not adequately protected if those private-contract protections are weak, unenforceable, or never disclosed.

The Alliance therefore urges EFSC to treat Green Diamond's role as more than that of a passive lessor. The Site Certificate process should require full disclosure of the lease's decommissioning, restoration, and financial-assurance clauses; should condition any Site Certificate on Green Diamond's acknowledgment that the land will be restored to a condition suitable for sustained forest management; and should ensure that restoration obligations cannot be extinguished by transfer, bankruptcy, or under-funding of the certificate holder's security. Absent such protections, the risk of an incompletely restored industrial site on former forest land falls ultimately on the land, the watershed, and the people of Keno.

Specific Questions for EFSC Review:

- ***What is the full decommissioning cost estimate for KFEC, including removal of all panels, batteries, wiring, foundations, roads, and fencing, plus land restoration and reforestation? Has this estimate been prepared by an independent party?***
- ***What form of financial assurance is proposed — specifically, is it a surety bond, irrevocable letter of credit, or fully funded trust? A parent guaranty from Ørsted is insufficient given the 30-year project life and the risk of corporate restructuring.***
- ***What is the decommissioning liability if KFEC is abandoned in year 5, year 10, or year 15 — and what amount of public or landowner exposure remains if the bond or letter of credit is set below full estimated restoration cost or is later reduced?***
- ***What contractual obligations does the current owner, Green Diamond, have to ensure decommissioning if KFEC LLC defaults?***
- ***The EFSC Site Certificate must include enforceable retirement/decommissioning conditions. What specific conditions will prevent Ørsted from transferring the project to an undercapitalized entity in a way that eliminates decommissioning accountability?***
- ***What are the precise decommissioning, restoration, and financial-assurance provisions in the Green Diamond–Ørsted option/lease agreement? Will those provisions be submitted as part of the ASC?***
- ***What contractual obligations does Green Diamond retain if the certificate holder defaults, becomes insolvent, or transfers the project? Can Green Diamond be required,***

as a condition of the Site Certificate, to acknowledge residual responsibility for ensuring the land is restored to a condition suitable for sustained forest management?

- ***Will the Site Certificate expressly bind any successor certificate holder and prohibit transfer of the project unless equivalent or stronger financial assurance and restoration obligations remain in place?***

“Let us regard the forests as an inheritance, given to us by nature, not to be despoiled or devastated, but to be wisely used, reverently honored and carefully maintained... to be surrendered to posterity as an unimpaired property.” – Ferdinand von Mueller

XI. Scenic Resources, Recreation, and Quality of Life

This section addresses the EFSC review areas of Scenic Resources and Recreation.

11.1 Scenic Impacts

Keno is known for its setting on the Klamath River beneath forested mountains. The KFEC site occupies the forested slopes visible from Keno and from Oregon Route 66 — a designated state highway from which visual quality is relevant under ODOT scenic policy. Replacing 8,600 acres of forest with an industrial solar installation, including panel arrays, security fencing, access roads, electrical infrastructure, and BESS containers, will permanently alter the visual character of the landscape as seen from Keno, surrounding residences, and the Klamath River corridor.

The EFSC review must include a visual impact analysis from all major viewpoints, including Oregon Route 66 corridor, Clover Creek Road, Keno residential areas, and any recreational trails or access points within or adjacent to the project boundary.

11.2 Recreation and Historic Land Use

Green Diamond's timberlands have been used by Keno and Klamath County residents for decades for hunting, hiking, off-road recreation, mushroom gathering, and other traditional outdoor activities. The 8,600-acre KFEC site represents a significant portion of the accessible backcountry in the Keno area. EFSC's recreation review must document the historic recreational use of this land by local community members and assess the permanent loss of that access.

Residents are encouraged to provide written statements documenting their historic use of these lands for recreational purposes, including hunting deer and elk on lands that overlap with the KFEC site boundary, gathering non-timber forest products, and accessing recreation opportunities that will be permanently fenced and closed.

XII. Community Action: Evidence the Public Should Submit to EFSC

The EFSC process provides multiple formal opportunities for public participation. The following categories of documentation, when submitted by individual landowners, residents, and community organizations, carry evidentiary weight in the EFSC record and can support conditions, mitigation requirements, or denial of the Site Certificate.

12.1 Documentary Evidence to Gather Now

Water and Hydrology Evidence
Well log copies and historical water-level records from registered wells
Pump test data showing current well yield and water quality
Photographs of springs, seeps, and seasonal streams within or adjacent to the KFEC boundary
Photographs of drainage patterns and seasonal flooding on Clover Creek Road
Snowpack observation records (depth measurements with dates and locations)
Before-and-after stream flow observations from any drainages near the project area

Fire and Safety Evidence
Fire response distance and time documentation from Keno RFPD Station #4 to KFEC site corners
Keno RFPD apparatus inventory and staffing records (public records request)
Photographs of evacuation route conditions on Clover Creek Road
Documentation of any prior fire incidents near the project area

Insurance premium information showing current rates and any notifications of risk-based changes

Road and Traffic Evidence

Photographs of current road surface condition on County Highway 603

Historical documentation of road damage from existing logging traffic

Traffic count data (ODOT or county) on Clover Creek Road

Maps showing home locations, road connections, and emergency access points

Documentation of any existing road weight limit signs or restrictions

Wildlife and Cultural Evidence

Personal observations of deer, elk, and wolf activity near the project area

Hunting records (harvest data, location data) from the KFEC site vicinity

Photographs of wildlife using forest areas within the KFEC boundary

Documentation of cultural sites, traditional use areas, or historic resources

Tribal member statements regarding traditional use of the project lands

Written Statements from Landowners

Written statements documenting historic recreational use of the KFEC project area

Written statements from neighboring landowners documenting concerns about water, fire, noise, and wildlife

Written statements from hunting guide operators, outfitters, and recreation businesses

Letters from local business owners regarding impacts to recreation-based tourism

XIII. Conclusion

The Klamath Falls Energy Center, as proposed, represents an unprecedented industrialization of Klamath County's timberlands at a scale and in a location that community evidence, scientific literature, state agency guidance, and common sense all indicate will produce serious, lasting harm to the people of Keno, the Klamath Basin and the natural systems they depend upon.

This report has identified and supported fourteen categories of substantial concern listed in the Executive Summary. The Oregon Energy Facility Siting Council has a statutory obligation to make findings of fact on each of its designated review areas before issuing a Site Certificate. The evidence presented in this report demonstrates that the NOI as submitted does not contain the information necessary to support affirmative findings on wildfire, water, fish and wildlife, threatened and endangered species, cultural resources, public services, or retirement and financial assurance. The formal Application for Site Certificate must comprehensively address every question raised in this report before any Site Certificate can lawfully issue.

The residents of Keno ask the Council to:

- Require a comprehensive biological assessment of the Keno mule deer herd, East Shasta Valley elk, and Klamath River salmon and steelhead before accepting the ASC as complete.
- Require a formal written assessment from Keno RFPD of its capability to respond to a BESS thermal runaway event as a condition of application completeness.
- Require site-specific hydrological modeling of groundwater impacts on domestic wells before accepting the ASC as complete.
- Require full government-to-government consultation with the Klamath Tribes under Section 106 as a condition of application completeness.
- Require an independent decommissioning cost estimate and an enforceable financial assurance instrument — not a parent guaranty — as a condition of any Site Certificate.
- Hold evidentiary hearings in Keno so that affected community members can participate meaningfully in a proceeding that will determine the future of their homes, water supplies, and landscape.

Destroying this area of forest that has stood for thousands of years and replacing it with a solar farm that has a lifespan of 30 years is a wrong that no one may ever be able to make whole again.

XIIV. Master List of Questions for the Formal ASC Review

The following is a consolidated list of all questions identified in this report that the applicant must address in the Application for Site Certificate (ASC). EFSC reviewing agencies and staff should treat these questions as minimum required disclosures.

Wildfire and BESS Safety

1. Has the applicant obtained a formal written assessment from Keno RFPD regarding the district's capability to suppress a utility-scale BESS thermal runaway at KFEC?
2. Will the applicant fund, train, and equip Keno RFPD with specialized BESS response equipment before operations begin?
3. What is the minimum and maximum fire department response time to all points of the KFEC site boundary?
4. What are the procedures for red flag warning days — will BESS be shut down, and who decides?
5. What evacuation routes exist for homes adjacent to the site, and has an evacuation analysis been completed?
6. What toxic gas plume modeling has been done for a worst-case BESS fire at various wind speeds and directions?
7. Are local firefighters trained for BESS response? Who is contractually responsible for training and equipment?
8. What are the insurance risk implications for Keno-area homeowners, and has an actuarial assessment been commissioned?
9. What fire suppression system will be utilized for a utility-scale BESS thermal runaway at KFEC?
10. What wildfire suppression plan will be utilized in addition to the BESS fire suppression system?
11. What volume of water (in gallons) would be required to suppress a wildfire at KFEC, and what permanent on-site water supply infrastructure will be constructed and maintained to meet this requirement?

Water and Hydrology

12. What peer-reviewed hydrological modeling demonstrates clearing 8,600 acres will not reduce groundwater recharge for domestic wells within a 5-mile radius?
13. Has Section 7 ESA consultation been initiated with NOAA Fisheries regarding threatened Klamath River coho salmon?
14. Has ODFW formally commented on impacts to Klamath River salmon and steelhead from KFEC upland deforestation?
15. What site-specific data demonstrates KFEC will not increase sediment loading or stream temperatures in Klamath River tributaries?
16. What site-specific hydrological modeling demonstrates that construction and operation of KFEC will not increase sediment loading, stream temperatures, or reduce cold groundwater inputs to Klamath River tributaries?
17. What permanent on-site containment, treatment, and monitoring systems for fire suppression water will be constructed and maintained?
18. Will the applicant fund baseline and ongoing groundwater monitoring for these specific contaminants before, during, and after operations?

Wildlife and Habitat

19. Has a comprehensive wildlife survey been submitted identifying all species using the KFEC site, including GPS-collared deer and elk from ODFW's Keno herd dataset?
20. Has ODFW formally approved the wildlife impact assessment for the Keno mule deer herd and East Shasta Valley elk?
21. What is the fencing plan and has it been reviewed by ODFW for wildlife compatibility?
22. What specific mitigation addresses the polarized light hazard to waterfowl near Lower and Upper Klamath National Wildlife Refuges?
23. Has the applicant conducted or reviewed comprehensive surveys identifying Roosevelt elk usage, including GPS-collared data from ODFW and CDFW for the East Shasta Valley and Keno area herds?
24. What specific mitigation measures (e.g., wildlife-friendly fencing, underpasses/overpasses, or habitat offsets) are proposed to maintain connectivity for both mule deer and Roosevelt elk migration corridors?

25. How will the project address cumulative impacts on elk and deer from habitat loss combined with increased human activity and road traffic?
26. What site-specific microclimate modeling (including albedo changes, evapotranspiration, daytime/nighttime temperature differentials, and impacts on wind/moisture patterns) has the applicant performed?
27. How will the project avoid or mitigate adverse effects on cold-water refugia and stream temperatures in Klamath River tributaries?
28. Has the analysis accounted for cumulative microclimate impacts from the solar array combined with forest clear-cutting on 8,600 acres?

Traffic and Roads

29. What is the structural load rating of County Highway 603, and what analysis supports compatibility with KFEC construction traffic?
30. Who pays for road damage from KFEC construction? Has a road use agreement with a performance bond been offered to Klamath County?
31. What is the peak daily truck trip estimate during construction?
32. What are the dimensions and weight ratings of the battery storage modules and transformer equipment? Do any loads require special permits or escorts that would require coordination with ODOT and Klamath County?
33. Has the applicant complied with KCLDC traffic impact study requirements?

Noise

34. What site-specific noise modeling has been performed at all residential receptors within 2 miles of the facility?
35. Does KFEC comply with OAR 340-035 noise standards at all affected residences?
36. Does the project comply with any applicable KCLDC noise standards for development in forest zones adjacent to residential uses?
37. What are the nighttime noise levels from BESS HVAC and cooling systems at the nearest residence, and do they comply with applicable nighttime standards?
38. What noise mitigation measures (e.g., barriers, mufflers, or equipment specifications) will be implemented, and will they be effective under varying wind and atmospheric conditions?

Land Use and Regulatory Compliance

- 39. Does the application demonstrate compliance with all KCLDC conditional use, road, traffic, drainage, and archaeological standards?
- 40. What Goal 4 exception findings are made, and how does the record demonstrate no adequate alternative site exists?

Cultural Resources

- 41. Has a Phase I Archaeological Survey been completed for the entire 8,600-acre site and submitted to SHPO?
- 42. Has formal Section 106 consultation been initiated with the Klamath Tribes?
- 43. Has the applicant conducted an ethnographic study with the Klamath Tribes to identify traditional land uses, gathering sites, hunting areas, and spiritually significant locations within the project area?
- 44. What are the protocols for inadvertent discovery of human remains or cultural artifacts?
- 45. Has a viewshed analysis been conducted for the Keno Pictographs site?

Public Services

- 46. What studies demonstrate that the existing PacifiCorp grid can reliably accommodate 400 MW of intermittent solar generation plus BESS output without significant curtailment or reliability issues?
- 47. How does the project timeline coordinate with PacifiCorp's Blueprint South transmission upgrades and what contingency plans exist if those upgrades are delayed or rerouted?
- 48. Will the applicant fund any necessary local grid reinforcements or upgrades required specifically for KFEC interconnection?
- 49. What analysis has been conducted on the cumulative environmental, grid and community impacts of all proposed and approved solar projects in Klamath County?
- 50. Given that only a fraction of announced projects are currently operational, what assurances exist that KFEC will not result in stranded infrastructure or unmitigated harms if similar delays occur?
- 51. What financial contribution will the applicant make to Keno RFPD, the Sheriff's Office, and regional EMS to offset increased public safety costs during both construction and operations?

- 52. Where will construction workers be housed, and has a housing impact analysis been performed?
- 53. Has the applicant prepared a Public Services Impact Assessment addressing each of these services as required by EFSC's public services review area?

Decommissioning and Financial Assurance

- 54. What is the full independent decommissioning cost estimate?
- 55. What form of financial assurance is proposed — surety bond, irrevocable LC, or fully funded trust?
- 56. What is the public and landowner decommissioning exposure at years 5, 10, and 15 if the bond or letter of credit is set below full estimated restoration cost or is later reduced?
- 57. What contractual obligations does Green Diamond have regarding decommissioning if KFEC LLC defaults?
- 58. How does the Site Certificate prevent project transfer to an undercapitalized entity?

“A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people.” – Franklin D. Roosevelt

References

Government and Regulatory Sources

1. Oregon Department of Energy (2025). Klamath Falls Energy Center — Project Page and NOI Documentation. <https://www.oregon.gov/energy/facilities/Pages/KFEC.aspx>
2. Oregon EFSC (2026). Project Updates Summary — KFEC. <https://www.oregon.gov/energy//facilities/Documents/General/EFSC-Project-Updates.pdf>
3. Oregon EFSC (2025). Staff Report: Battery Storage Technology Overview. <https://www.oregon.gov/energy/facilities/Council%20Meetings/2025-05-16-EFSC-Item-C-Staff-Report-Battery-Storage-Technology-Overview.pdf>
4. Oregon Department of Fish and Wildlife (2024). ODFW Solar Siting Guidance. https://www.dfw.state.or.us/habitat/solar/docs/ODFW_Solar_Guidance.pdf
5. Klamath County Comprehensive Plan (2023). Goal 4 Forest Lands Policies. <https://www.klamathcounty.org/DocumentCenter/View/2686/Goal-4-PDF>
6. Klamath County Land Development Code (2023). Complete Code. <https://www.klamathcounty.org/DocumentCenter/View/33803/Complete-Code-PDF>
7. Klamath County Fire Defense Board (2026). Member Districts. <https://kcfdb.com/about>
8. Oregon Department of Energy (2026). KFEC Public Meeting Presentation (March 5, 2026).
9. U.S. Department of the Interior / USGS (2025). Oregon Mule Deer Keno Winter Ranges. <https://data.usgs.gov/datacatalog/data/USGS:679177cbd34ea6a4002bfadc>
10. U.S. Department of the Interior / USGS. Oregon Mule Deer Klamath Basin Migration Corridors. <https://catalog.data.gov/dataset/oregon-mule-deer-klamath-basin-migration-corridors-f2360>
11. CDFW/ODFW (2025). East Shasta Valley Elk Migration Corridors — Siskiyou County, CA and Klamath County, OR. GIS Dataset ds2903.
12. NOAA Fisheries (2024). Klamath River Basin — Coho Salmon, Chinook, and Steelhead. <https://www.fisheries.noaa.gov/west-coast/habitat-conservation/klamath-river-basin>
13. OPB (2024). Fish biologists collaborate to track pioneering Klamath River salmon. <https://www.opb.org/article/2024/11/03/klamath-river-salmon-tracking/>
14. ODFW (2022). Frequently Asked Questions Regarding the Klamath River. <https://communitysentinel.media/wp-content/uploads/2026/02/FAQ-Klamath-Dam-removal-and-fish-reintroduction-2022.pdf>
15. National Wildfire Coordinating Group (NWCG) (2026). Solar Farm Safety. <https://www.nwcg.gov/6mfs/miscellaneous-fireline-hazards/solar-farm-safety>

16. U.S. Department of Energy (2023). Solar Photovoltaic Hardening for Resilience — Wildfire. <https://www.energy.gov/femp/solar-photovoltaic-hardening-resilience-wildfire>
17. U.S. Fire Administration / FEMA (2023). Responding to fires that include energy storage systems (ESS). <https://www.usfa.fema.gov/blog/responding-to-fires-that-include-energy-storage-systems-are-a-new-and-evolving-hazard/>
18. EPA (2025). Battery Energy Storage Systems Fact Sheet and Safety Guidelines. <https://ctif.org/news/epa-releases-new-bess-battery-storage-safety-guidelines-amid-rising-fire-concerns>
19. PacifiCorp (2004). Klamath River Relicensing Application — Exhibit E Cultural Resources (includes Keno Pictographs). https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/hydro/klamath-river/relicensing/klamath-final-license-application/Exhibit_E_Cultural_Resources.pdf
20. Klamath Tribes Culture and Heritage Department. Site Protection Program. <https://klamathtribes.org/culture/>
21. Special Districts Association of Oregon (2023). Keno RFPD Fire Chief Posting. <https://www.sdao.com/keno-rfpd-fire-chief>
22. Keno Rural Fire Protection District. Home Page. <http://www.kenofire.com>

Peer-Reviewed and Scientific Sources

23. Roebroek et al. (2023). Revisiting the land use conflicts between forests and solar farms through energy efficiency. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2023.139399>
24. Yue et al. (2022). Minimizing environmental impacts of solar farms: hydrology review. *Environmental Research: Infrastructure and Sustainability*. <https://iopscience.iop.org/article/10.1088/2634-4505/ac76dd>
25. Journal of Umm Al-Qura University (2025). A review: the potential impact of large-scale solar farms on the water cycle. <https://link.springer.com/article/10.1007/s43995-025-00102-7>
26. Hydrology (2025). A Review of the Key Impacts of Deforestation and Wildfires on Water Resources. *MDPI*. <https://doi.org/10.3390/hydrology12100271>
27. Hunt et al. (2025). Assessing the Impact of Solar Farms on Waterbirds. *Animals (MDPI)*. <https://www.mdpi.com/2673-7159/5/1/4>
28. Nature Conservancy (2024). Solar Energy Development Doesn't Have to Destroy Vital Habitat. *TNC Science Brief*. <https://blog.nature.org/science-brief/solar-development-doesnt-have-to-destroy-vital-habitat/>

29. ScienceDirect / Renewable and Sustainable Energy Reviews (2025). All that glitters — Review of solar facility impacts on fauna. <https://www.sciencedirect.com/science/article/pii/S1364032125006689>
30. Resources for the Future (2025). Converting Forests to Solar Facilities: Causes, Potential, and Implications. <https://www.rff.org/publications/reports/converting-forests-to-solar-facilities-causes-potential-and-implications>
31. University of Louisiana at Lafayette (n.d.). A Brief Study of the Acoustic Impacts of Solar Power Generation Facilities. EESE Faculty Publication. <https://eese.louisiana.edu/sites/eese/files/A%20Brief%20Study%20of%20the%20Acoustic%20Impacts%20of%20Solar%20Power%20Generation%20Facilities.pdf>
32. PNAS (2025). Impact of large-scale solar on property values: Diverse effects and causal mechanisms. <https://doi.org/10.1073/pnas.2418414122>
33. LaBella Associates (2024). Lighting the Way: Solar Decommissioning Policies Gaining Traction. <https://labellapc.com/insights/lighting-the-way-solar-decommissioning-policies-gaining-traction/>

News and Community Sources

34. Herald and News (2026, February 27). Keno community learns of nearby 8,600-acre solar project proposal in Klamath County timberlands. https://www.heraldandnews.com/freeaccess/keno-community-learns-of-nearby-8-600-acre-solar-project-proposal-in-klamath-county-timberlands/article_9a75f18f-e71e-4e4e-8b04-a1e441b3c8cb.html
35. KDRV (2026, March 24). Proposed solar farm raises concerns in rural Keno. https://www.kdrv.com/news/top-stories/proposed-solar-farm-raises-concerns-in-rural-keno/article_f7ab09b1-1f19-4622-92a1-aa156875472c.html
36. Jefferson Public Radio (2025, November 3). Klamath County greenlights massive solar project. <https://www.ijpr.org/environment-energy-and-transportation/2025-11-03/klamath-county-greenlights-massive-solar-project>
37. NW Sportsman Magazine (2025, February). Oregon Mule Deer Migrations Mapped in Latest USGS Report. <https://nwsportsmanmag.com/oregon-mule-deer-migrations-mapped-in-latest-usgs-report>
38. Trout Unlimited (2025). Klamath River — Priority Waters. <https://prioritywaters.tu.org/klamath/>

Additional References:

39. U.S. Forest Service research: <https://research.fs.usda.gov/download/treesearch/67587.pdf>

40. MapQuest directions from Keno to Sky Lakes Medical Center:
<https://www.mapquest.com/directions/from/us/oregon/keno-or-282899547/to/us/oregon/sky-lakes-medical-center-377743021>
41. MapQuest directions from Keno to the Klamath County Sheriff's Office.
: <https://www.mapquest.com/directions/from/us/oregon/keno-or-282899547/to/us/oregon/klamath-county-sheriffs-office-353774768>
42. Battery-storage thermal-runaway and fire-suppression information: <https://hct-world.com/how-fire-suppression-protect-battery-storage-from-thermal-runaway/>
43. NOAA Fisheries information concerning the Klamath River Basin:
<https://www.fisheries.noaa.gov/west-coast/habitat-conservation/klamath-river-basin>
44. Peer-reviewed scientific research: <https://www.pnas.org/doi/10.1073/pnas.0405895101>
45. U.S. Fish and Wildlife Service information regarding ESA Section 7 consultation:
<https://www.fws.gov/service/esa-section-7-consultation>
46. Oregon forestry information: <https://oregonforests.org/media/804>
47. U.S. Geological Survey report: <https://pubs.usgs.gov/bsr/2003/0004/bsr030004.pdf>
48. Solar-facility noise information: <https://pureskyenergy.com/news-community/articles/truth-about-noise-from-solar-farms/>
49. Washington Department of Ecology publication:
<https://apps.ecology.wa.gov/publications/parts/2506003part12.pdf>
50. Comparative examples of noise levels: <https://www.iacacoustics.com/article/comparative-examples-of-noise-levels>
51. Oregon legislative information concerning House Bill 3179:
<https://olis.oregonlegislature.gov/liz/2023r1/Measures/Overview/HB3179>
52. Oregon energy-facility cultural-resources exhibit:
<https://www.oregon.gov/energy/facilities/Facility%20Exhibits/SSP/2024-05-16-SSPAPPDc25-19-ASC-Exhibit-S-Cultural.pdf>
53. The Klamath Tribes natural-resources information: <https://klamathtribes.org/natural-resources/>
54. State financial-assurance requirements: https://cdn.prod.website-files.com/698171fc2ab2be1c0ffe1751/69f414feb2d23579bac5b20d_State-Financial-Assurance-Requirements.pdf
55. Background information concerning parent-company guarantees: <https://legal-resources.uslegalforms.com/p/parent-company-guarantee>
56. Article concerning Ørsted financial issues 17: <https://community.im/blog/2025/08/11/new-orsted-financial-crisis-raises-further-questions-over-manx-wind-farm/>

57. Peer-reviewed life-cycle or sustainability research:

<https://www.sciencedirect.com/science/article/abs/pii/S0959652623041161>

58. Oregon Revised Statutes 527.755: https://oregon.public.law/statutes/ors_527.755

59. ODFW Biologist Mike Moore's comments, (2025):

https://www.youtube.com/watch?v=8F1GmQk_xU0 and

https://www.youtube.com/watch?v=b_iBoiHHjm4

60. Forest Owner Wants To Put Burned Acreage Back Into Carbon Offset Market , But Critics Skeptical, Oregon Capital Chronicle, January 21, 2025:

<https://oregoncapitalchronicle.com/2025/01/21/forest-owner-wants-to-put-burned-acreage-back-into-carbon-offset-market-but-critics-skeptical/>