



DECATUR ISLAND • SAN JUAN COUNTY

Clear-cut and grade 8 acres of Decatur forest for solar panels?

Community solar is the right goal. This forest is the wrong place. Here's what could be lost.

Photo: the forest "that would be cleared and graded", from OPALCO's own permit application (San Juan County LANDUSE-25-0091, 2025).

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Friends supports solar, on cleared land first

Since 2024, Friends and OPALCO have worked together on a county code update that would more than double the land open to commercial renewable energy.

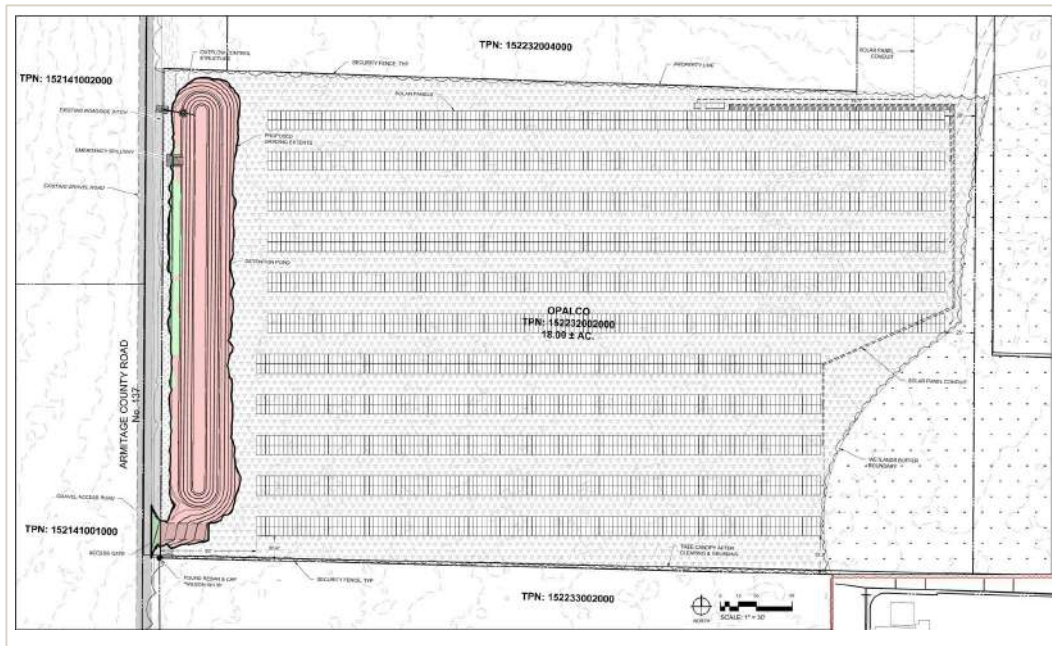
Our shared priority: rooftops, parking lots and land that is already cleared or built on, like Friday Harbor Presbyterian Church, St. David's Episcopal Church and the Port of Friday Harbor's parking lot.

On Decatur, after visiting the site and hearing from many islanders, Friends is asking for clear conditions, and sharing this report so our community is informed.

CONDITIONS FRIENDS ASKED FOR THAT ARE NOT YET REQUIRED

- 1 Protect the soil: set posts instead of stripping the whole site
- 2 Revegetation standards backed by a bond (e.g. 75% survival after 5 years)
- 3 A public decommissioning plan that returns the land to farm or forest
- 4 A planting plan for the buffers and under the arrays
- 5 Keep the large dead trees, and survey them properly before any clearing

THE PLAN



Cut the trees, scrape the soil, fence in 4,470 panels

8 acres cleared in two areas. No forest replanting.

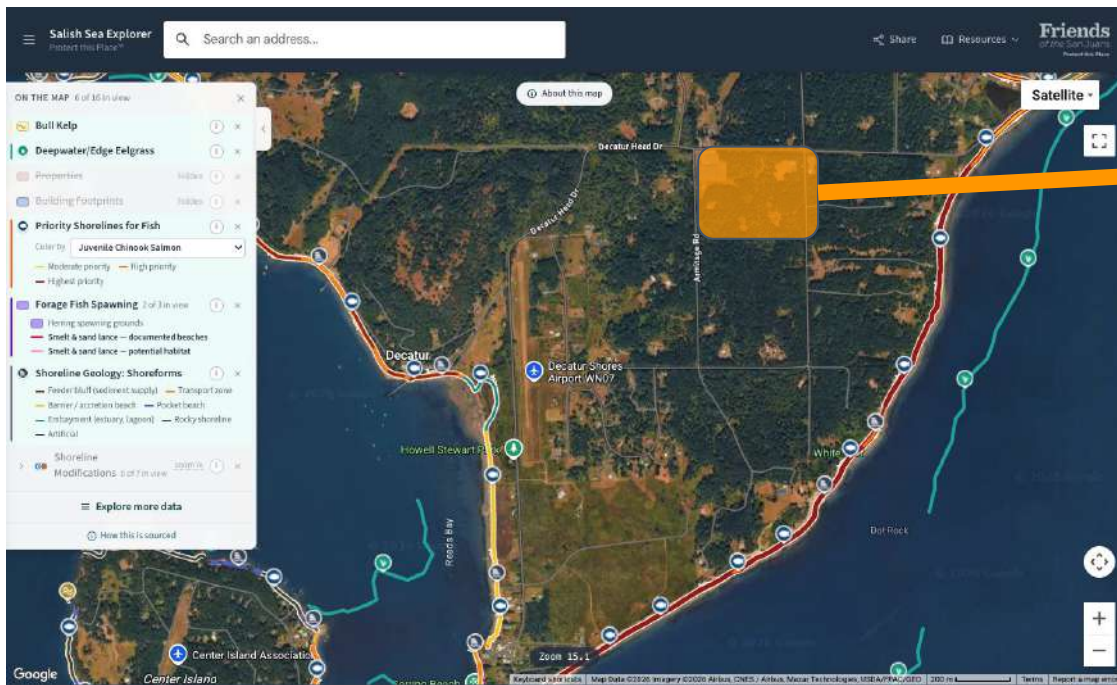
Soil cut **up to 3–4 feet deep** to make it flat; ~2,160 cubic yards moved.

A **7-foot fence** topped with barbed wire, and a detention pond along Armitage Road.

OPALCO site plan sheet C1.03 (Cushing Terrell, Oct 2025), showing Area A, one of two proposed arrays; SEPA checklist (Dec 2025); WA DNR Forest Practices Application 2820092 ("Reforestation: not required ... converting to non-forestland").

WHERE

A major logging/clearing operation in the middle of Decatur Island



Left: Salish Sea Explorer (salishsea.knauernever.com) with Friends of the San Juans habitat layers; imagery ©2026 Google, Airbus, CNES / Airbus, Maxar Technologies, USDA/FPAC/GEO.
Right: clearing outlines from OPALCO site plan sheet C030 (revised 28 Apr 2026), approximate; imagery © Mapbox © Maxar.

THE SITE



Their plan: Clear the forest, cause more runoff and install solar panels

OPALCO already runs a solar array and substation here, on land cleared years ago.

The expansion would clear **~6 acres** (Area A) and **~2 acres** (Area B) of standing forest.

Clearing areas, wetlands, Native Growth Area and buildings: OPALCO site plan sheet C030, revised 28 Apr 2026 (resubmitted to San Juan County Sept 2026), fit to county parcel corners; approximate. Buffer widths from OPALCO's SEPA checklist (2025). Imagery © Mapbox © Maxar.

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WHAT'S THERE NOW

A mixed-age second-growth forest with nine wetlands



Douglas-fir, grand fir, western hemlock, western red cedar and red alder over salal and sword fern.

86%

of Area A under tree canopy over 16 ft (lidar)

9 wetlands

1.2 acres; one rated Category II ESA delineation, Feb 2025

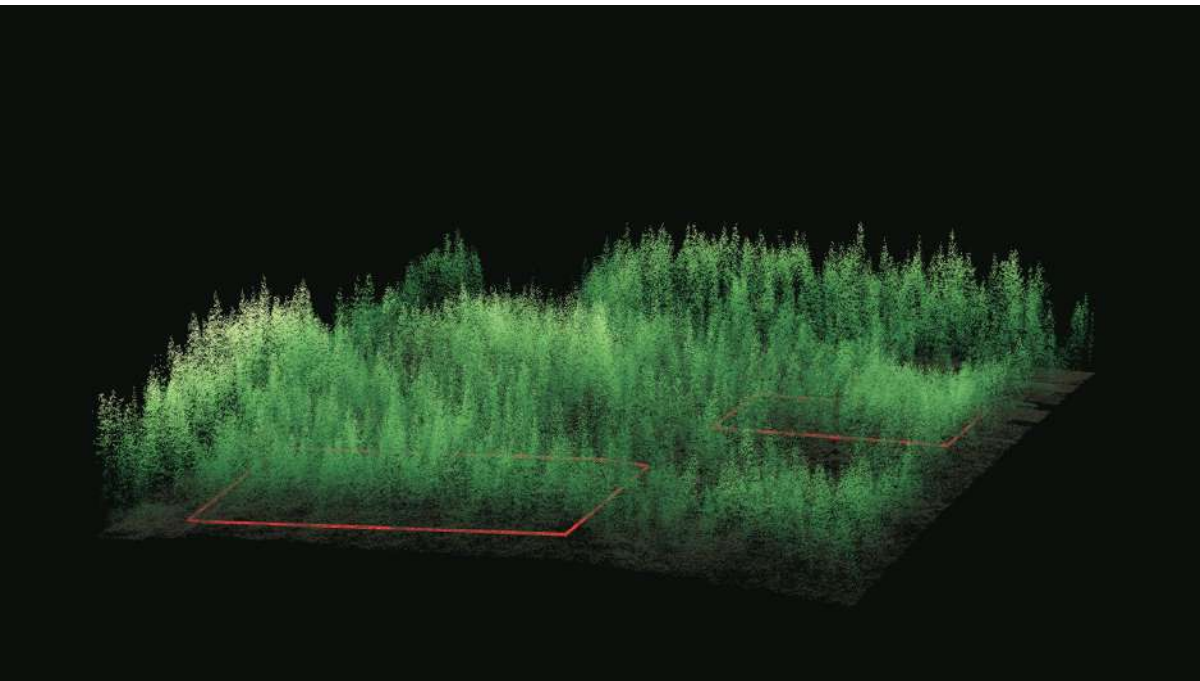
Large snags

standing dead trees, habitat for woodpeckers, bats, and other species.

OPALCO SEPA checklist

Photos and species list: OPALCO permit application and SEPA checklist (LANDUSE-25-0091, 2025). Wetlands: ESA delineation in SEPA checklist.

MEASURED FROM THE AIR



Each dot is one laser return, colored by height above ground. Red: the two areas to be cleared. Heights exaggerated 2× for visibility.

NOAA Digital Coast 2019 San Juan lidar point cloud (dataset 9495): 3.8 million laser returns over the site. Tree height = highest return minus ground, 1 m grid; tree counts = local high points over 15 m (approximate). Clearing outlines approximate. Analysis: EarthAtlas.

Lidar shows hundreds of tall trees in the clearing areas.

~400

trees taller than 49 ft in the two clearing areas

~50

trees taller than 98 ft

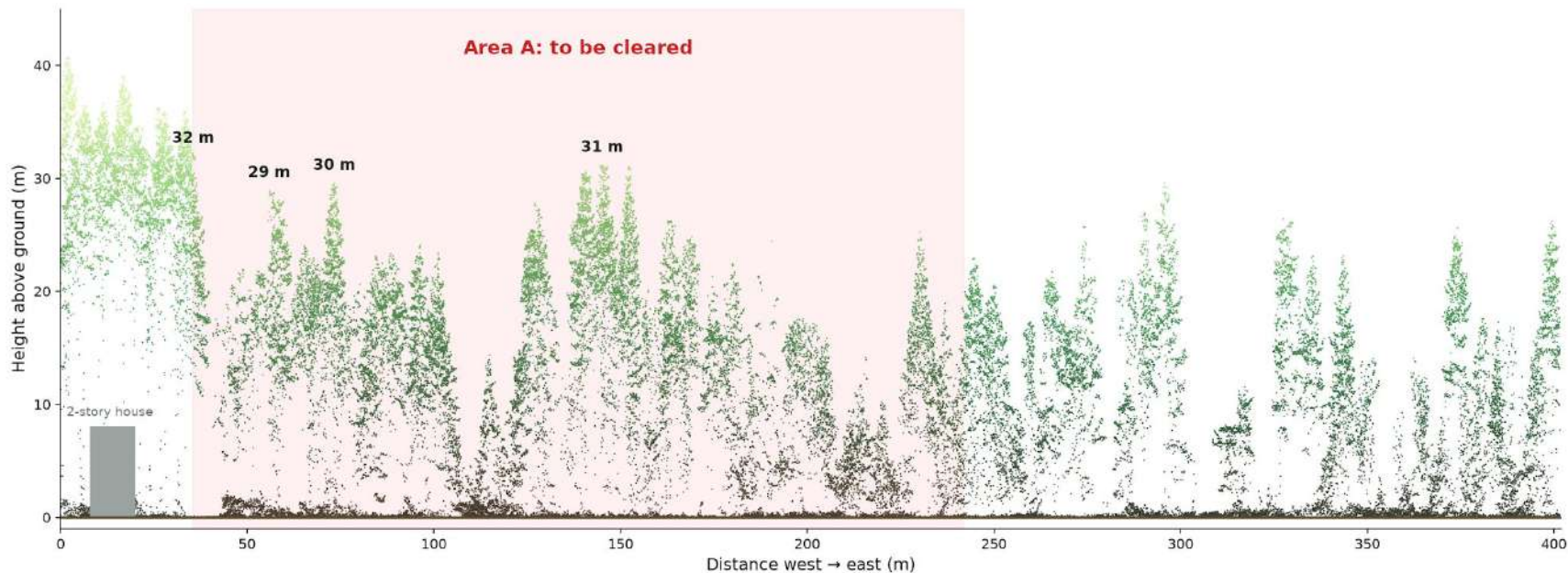
118 ft

the tallest tree in Area A

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MEASURED FROM THE AIR

A slice through the forest OPALCO would clear

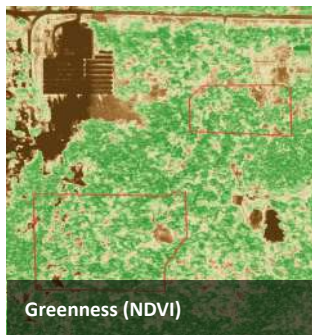


NOAA Digital Coast 2019 San Juan lidar point cloud (dataset 9495). Every laser return in a 6 m-wide strip running west to east through the middle of Area A, plotted at its measured height above ground (vertical axis stretched for readability). House (8 m) drawn for scale. Analysis: EarthAtlas.

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MEASURED FROM THE AIR

What's standing there: a tree-by-tree inventory



	Area A (5.9 ac)	Area B (2.1 ac)
Trees over 49 ft (15 m)	302	95
Trees over 98 ft (30 m)	50	0
Tallest tree	118 ft (36 m)	92 ft (28 m)
Half the canopy is taller than	60 ft (18 m)	42 ft (13 m)
Canopy cover over 16 ft (5 m)	86%	67%

Another ~540 trees over 49 ft stand within one tree-height of the outlines.

Lidar and aerial images can't show which trees are dead. OPALCO's consultant counted 44 large dead trees in the clearing areas.

Tree counts and heights: NOAA Digital Coast 2019 San Juan lidar (dataset 9495), 1 m canopy-height grid; trees = local high points over 15 m (approximate).
Aerial photos: USDA NAIP, 28 Oct 2023, 0.6 m; greenness = NDVI from its near-infrared and red bands. Red: clearing outlines, approximate. Analysis: EarthAtlas.

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WATER

Today this forest absorbs heavy storms. Cleared, it sheds the water.

In 30 years of simulated island weather, the forested slope produced **no runoff at all**. Cleared, it starts running off about one year in three. In a typical big winter storm, clearing the 8 acres adds:

Forest today

0 (baseline)

Reseeded after construction

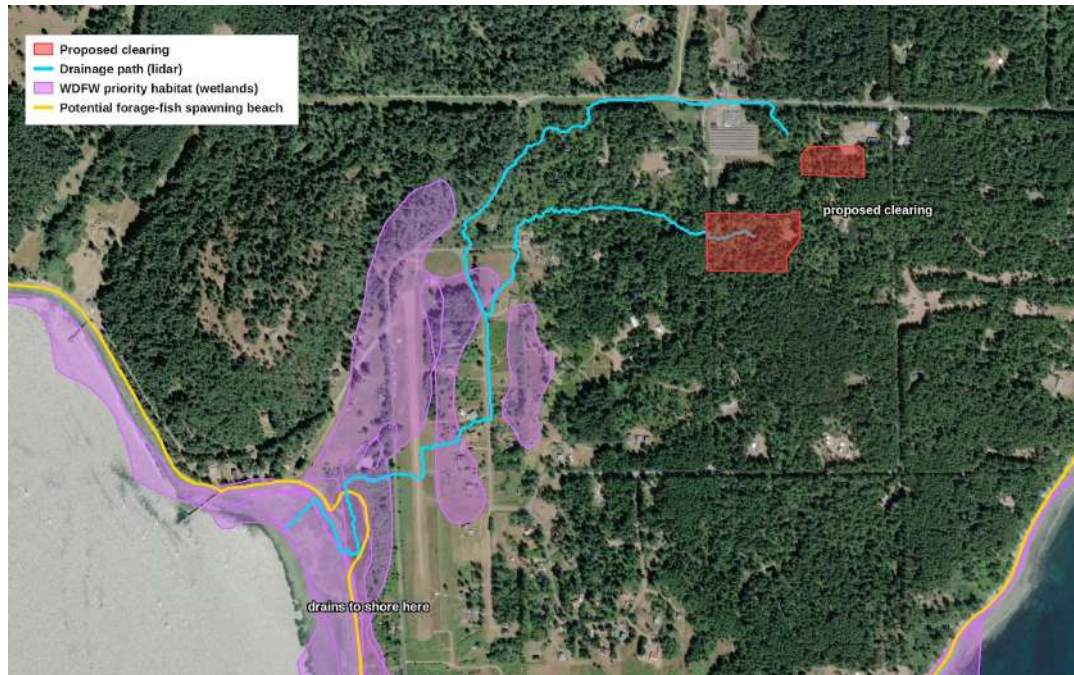
+24,500 gallons

Bare and graded during construction

+105,000 gallons

Extra runoff compared with today's forest in a 2-year, 24-hour storm (1.43 in, NOAA Atlas 2 nearest cell): USDA NRCS TR-55 curve numbers on SSURGO soils (Whidbey-Hoypus; a dense layer ~3 ft down perches water). 30-year result and runoff frequency: USFS Disturbed WEPP 2.0. Modeled projections, not measurements; whether the water leaves the property depends on roadside drainage not yet surveyed.

FROM FOREST TO SHORELINE



That water drains toward beaches where the fish that feed salmon spawn

OPALCO's plans send Area A's stormwater into the **roadside ditch**.

On the way, the drainage runs directly through 730 meters of various wetlands that WDFW maps as **priority habitat**.

Downhill, ~2 km, Friends has mapped potential **forage-fish spawning shoreline** and a lagoon, beside **eelgrass**. Forage fish feed salmon. Salmon feed Southern Resident orcas.

Drainage design: OPALCO site plan and narrative (Cushing Terrell, 2025) and site plans (28 Apr 2026); county staff report (Feb 2026). Flow paths: 2019 WA DNR/NOAA lidar, WhiteboxTools; ditch-to-shore link not yet checked on the ground. Shoreline: Friends of the San Juans with WDFW, DNR, UW. Priority habitats: WDFW Priority Habitats and Species, public layer (accessed Oct 2026).

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IN THEIR OWN WORDS

OPALCO's paperwork contradicts itself

WHAT THE APPLICATION SAYS	WHAT THE RECORD SHOWS
<i>"There would be no increase in runoff."</i>	The county's own staff found OPALCO's flow-control exemption "not applicable", and the pond must be modeled at nearly five times the area.
<i>Wetlands "would not be affected."</i>	The April 2026 plans drain Area B through a swale to a riprap pad at the edge of the Native Growth Area and a wetland buffer.
<i>"No off-site discharges to ground or surface water would occur."</i>	The detention pond outflows into a county roadside ditch.
<i>"Zero acres would be converted to ... nonforest use."</i>	The state forestry filing is a conversion to non-forest use, with no replanting.

OPALCO SEPA checklist (June & Dec 2025) pp. 10–13; OPALCO CUP application (2025) PDF p. 38; OPALCO site narrative (Dec 2025) p. 2; OPALCO site plans C101, C201 (28 Apr 2026); San Juan County CUP staff report (12 Feb 2026) p. 51; WA DNR FPA 2820092 Q2, Q20.

CARBON AND SOIL

Clearing it puts ~2,900 tonnes of stored carbon at risk of becoming emissions, in the trees and in the living soil

~1,000 t

CO₂ in the trees and roots (range ≈ 440–1,640 t), about a year of exhaust from ~230 cars

~1,900 t

more CO₂ in the top foot of soil, which grading up to 3–4 feet deep disturbs

17 m

of fungal threads in every teaspoon of that healthy soil, linking the forest's roots

[EarthAtlas.org/carbon](https://earthatlas.org/carbon) on Google Earth Engine (ESA CCI Biomass v6; IPCC 0.47 C fraction, 0.24 root-to-shoot; OpenLandMap SOC 0–30 cm) over the ~8-acre footprint in OPALCO's April 2026 site plan. Cars: US EPA, 4.6 t CO₂/vehicle/yr. Fungi: SPUN hyphal density, 1 km (CC BY 4.0).

Bats in the forest, orcas and salmon downstream



Townsend's big-eared bat

WDFW's priority species records place these bats on or near Decatur Island.

OPALCO's one rainy night of listening recorded no bats. A resident's three nights nearby recorded 640+ bat calls. The county accepted OPALCO's survey on 9 Oct 2026.



Toads, woodpeckers

Western toads (a state Candidate species) were recorded in the Decatur area in 2024 and 2025; they breed in wetlands like the nine here. Pileated woodpeckers, big-tree and snag specialists, are recorded within 1 km.



Orcas, Chinook, rockfish

Where the site's runoff path reaches salt water is federal critical habitat for endangered Southern Resident orcas, threatened Chinook salmon and endangered bocaccio rockfish.

WHAT FRIENDS IS ADVOCATING FOR

Right goal. Wrong place.

Islanders need more local, clean power, and many OPALCO members back community solar. But it shouldn't come at the cost of standing forest, wetlands, and the soil and shoreline downhill. Already-cleared and built land should come first.

OPALCO's Site Alternatives Report (Oct 2025) is in the county record. The Hearing Examiner found a fuller alternatives review was not required at this stage (Decision ¶82–85).

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The open space was redrawn around the clearing



In 2012 the open space ran road to road along the south edge, creating a wildlife corridor to one of the largest ponds on Decatur Island.

The 2026 version moves open space out of Area A into fragmented blocks of space, weaving around fenced properties in widths as narrow as 20 feet or so, and counts land already protected as Native Growth Area.

San Juan County records: Simple Land Division, AFN 2012-0611001 (approved 18 May 2012); Simple Land Division Revision, LANDUSE-26-0135 (approved 1 Oct 2026). Color highlighting of county drawings: Dawni Cunningham. Open space traced onto parcel lines and aerial imagery; approximate. Clearing areas and Native Growth Area: OPALCO site plan sheet C030, revised 28 Apr 2026. Analysis: EarthAtlas.

Approved, but key decisions are still open

Approved by the county Hearing Examiner on 8 May 2026, with 11 conditions.

On 1 October 2026 the county approved moving the land's protected 30% open space (Condition 9), subject to a 21-day appeal period. About a quarter of the 'new' open space (~2.2 of ~8.1 acres) was already protected as Native Growth Area in 2010, and nearly an acre more is wetland.

Land that was already off-limits now counts toward the 30% requirement, while about 3 acres of forest the 2012 open space protected falls inside Area A.

The Native Growth Area covenant was left unchanged.

Follow the record: San Juan County permit portal, parcel 152232005000.

STILL TO BE DECIDED

- 1 Revised stormwater plan and clearing permit
- 2 Whether OPALCO seeks a covenant change
- 3 State Forest Practices permit
- 4 Building permit. No tree removal until it is issued.
- 5 Fire plan

Every number, and where it came from

- Project facts, plans and photos: San Juan County SmartGov public records (LANDUSE-25-0091, -25-0054, -26-0135; Hearing Examiner decision 8 May 2026; staff report 12 Feb 2026); WA DNR FPA 2820092.
- Outlines: OPALCO site plan sheet C030, revised 28 Apr 2026 (Sept 2026 resubmittal to San Juan County), fit to county parcel corners; Area A ~5.9 ac (including a ~0.4-ac existing opening the plan does not mark for tree clearing), Area B ~2.1 ac; 8.55 ac in the Dec 2025 filing. Wetlands, Native Growth Area and buildings from the same plan; wetland buffer widths from OPALCO's SEPA checklist.
- Carbon: [EarthAtlas.org/carbon](https://earthatlas.org/carbon) on Google Earth Engine (ESA CCI Biomass v6; OpenLandMap SOC; ESA WorldCover). The ~2,900 t total is trees and roots plus the top 30 cm of soil, both as CO₂; stored carbon at risk, not a measured emission. Car equivalence: US EPA.
- Fungi: SPUN hyphal density (CC BY 4.0).
- Runoff: extra runoff compared with today's forest, USDA NRCS TR-55 on NRCS SSURGO WA055 soils and a NOAA Atlas 2 Vol 9 design storm; 30-year forest result and runoff frequency, USFS Disturbed WEPP 2.0 (Anacortes climate, 25.5 in/yr).
- Drainage: NOAA Digital Coast 2019 San Juan lidar; WhiteboxTools. Shoreline habitat (forage-fish spawning, eelgrass, bull kelp, priority shorelines for fish, shoreforms): Friends of the San Juans, via Salish Sea Explorer. Wildlife: iNaturalist; species status: WDFW.
- Maps: Salish Sea Explorer (salishsea.knauernever.com), imagery ©2026 Google, Airbus, CNES / Airbus, Maxar Technologies, USDA/FPAC/GEO; site close-ups © Mapbox © Maxar. Analysis: EarthAtlas.org.