

Department of Fish and Game

HABITAT SECTION Fairbanks Regional Office

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FISH HABITAT PERMIT

FH22-III-0084-AMENDMENT 4

ISSUED: November 13, 2024 EXPIRES: December 31, 2029

Northern Star (Pogo) LLC PO Box 145 Delta Junction, AK 99737

RE: Water Withdrawals

APMA 9500

Goodpaster River (334-40-1100-2490-3407)

Sections 22, 23, 27, T 5S, R 14E, FM (Big Delta B-2)

Multiple Waterbodies (See Table 1)

Median Withdrawal Coordinate (WGS84): 64.4134 N, 144.7385 W

Dear Northern Star (Pogo) LLC:

Pursuant to AS 16.05.871(b) and AS 16.05.841 (Fishway Act), the Alaska Department of Fish and Game (ADF&G) Habitat Section has reviewed your APMA F259500 application requesting renewal of drilling activities and associated water withdrawals in support of your exploration activities.

Project Description

You will withdraw water from the Goodpaster River as well as multiple non-anadromous waterbodies listed in Table 1 in support of your exploratory drilling operation. Water will be withdrawn from the streams April 15 to October 15 each season, and year-round only from the Unnamed Pond ("J Stand").

Anadromous Fish Act

The Goodpaster River (Stream No 334-40-11000-2490-3407) has been specified as being important for the spawning, rearing, or migration of anadromous fishes pursuant to AS 16.05.871(a). This reach of the river provides spawning and migratory habitat for Chinook and chum salmon, and juvenile Chinook salmon rear in the river near your project – see Stipulation

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#2 for intake special instructions. In addition, all waterbodies listed in Table 1 support or are likely to support resident fish, such as Arctic grayling, slimy sculpin, and Alaska blackfish.

Table 1: Water Withdrawal Locations (resident fish waterbodies).

Waterbody	Township	Range	Section	Coordinates
Aluggnutt Creek	5S	16E	32	64.43768, -144.612
Behrens Creek	5S	13E	24	64.46354, -145.086
Blarney Creek	6S	16E	9	64.40777, -144.587
Cactus Creek	6S	15E	9	64.40944, -144.811
Contact Creek	5S	14E	28, 33	64.44546, -144.993
Jake Creek	5S	16E	32	64.43644, -144.612
North Creek	5S	15E	24	64.46557, -144.871
North Star Creek	5S & 6S	14E	36 & 1, 2	64.42700, -144.909
Oriental Creek	6S	16E	3	64.42432, -144.546
Otter Creek	5S	15E	32, 33	64.43836, -144.802
Pogo Creek	5S	14E	35	64.44400, -144.920
Shawnee Creek	6S	15E	2	64.43316, -144.682
Shawnee Creek West Fork	5S	15E	35	64.43830, -144.721
Sonora Creek	6S	15E	3, 10, 15	64.40400, -144.749
Sonora Creek West Fork	6S	15E	3, 10	64.41850, -144.761
Star Creek	6S	14E	1	64.42809, -144.874
Stingray Creek	5S	15E	29, 32	64.44300, -144.830
Tam Creek	6S	15E	11, 14, 15	64.39642, -144.743
Unagi Creek	5S	14E	15	64.47649, -144.950
Unnamed Pond ("J Stand")	5S	14E	27	64.44858, -144.941
West Creek	6S	14E	6	64.42675, -144.836

Your project as proposed should not have adverse effects on anadromous fish or their habitat and should not obstruct the free passage of fish. In accordance with AS 16.05.841 and AS 16.05.871(d), project approval is hereby given subject to the project description and permit terms, with the following stipulations:

1) Each water intake structure shall be designed to prevent the entrainment, impingement and/or entrapment of fish and shall be installed and maintained at each intake location. The effective screen openings may not exceed 0.25 inches (1/4 inch), and water velocity at the screen/water interface may not exceed 0.5 feet per second when the pump is operating.

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2) Intake structures deployed in the **Goodpaster River** shall be placed in a portion of the channel with swift flowing water to avoid juvenile rearing and/or weak swimming fish, and from July 15 – October 15 each season shall be suspended in the water column with a depth that prevents disturbance of stream/lakebed material.

For detailed information regarding screened intake device design please consult our webpage http://www.adfg.alaska.gov/index.cfm?adfg=uselicense.withdrawal and Technical Report No. 97-8 (http://www.adfg.alaska.gov/static/license/uselicense/pdfs/97 08.pdf).

Permit Terms

This letter constitutes a permit issued under the authority of AS 16.05.871 and must be retained on site during project activities. Please be advised that this determination applies only to activities regulated by the Habitat Section of ADF&G; other agencies also may have jurisdiction under their respective authorities. This determination does not relieve you of your responsibility to secure other permits; state, federal, or local. You are still required to comply with all other applicable laws.

You are responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved project. For any activity that significantly deviates from the approved plan, you shall notify the ADF&G Habitat Section and obtain written approval in the form of a permit amendment before beginning the activity. Any action that increases the project's overall scope or that negates, alters, or minimizes the intent or effectiveness of any provision contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of the ADF&G Habitat Section. Therefore, it is recommended that you consult the Habitat Section before considering any deviation from the approved plan.

You shall give an authorized representative of the state free and unobstructed access to the permit site, at safe and reasonable times, for the purpose of inspecting or monitoring compliance with any provision of this permit. You shall furnish whatever assistance and information the authorized representative reasonably requires for monitoring and inspection purposes.

In addition to the penalties provided by law, this permit may be terminated or revoked for failure to comply with its provisions or failure to comply with applicable statutes and regulations. You shall mitigate any adverse effect upon fish or wildlife, their habitats, or any restriction or interference with public use that the commissioner determines was a direct result of your failure to comply with this permit or any applicable law.

You shall indemnify, save harmless, and defend the department, its agents, and its employees from any and all claims, actions, or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or your performance under this

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permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the department's negligence.

You may appeal this permit decision relating to AS 16.05.871 in accordance with the provisions of AS 44.62.330-630.

Please direct questions about this permit to Habitat Biologist Lauren Yancy at 907-459-7254 or lauren.yancy@alaska.gov.

Sincerely,

Doug Vincent-Lang

Commissioner

By: Audra L. J. Brase

Fairbanks Regional Supervisor

ecc: Al Ott, ADF&G Habitat, Fairbanks

Mike Murenbeeld, Northern Star (Pogo) Exploration Russell Gossett, Northern Star (Pogo) Environmental

Andrew Gryska, ADF&G SF, Fairbanks Brandy Baker, ADF&G SF, Delta Junction

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USACE, Alaska District

NOAA Fisheries HCD, Anchorage AWT, Northern Detachment, Fairbanks

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