



## **FISH HABITAT PERMIT**

**FH22-III-0065**

ISSUED: March 11, 2022  
EXPIRES: December 31, 2022

Chris Eckert  
Donlin Gold  
4720 Business Park Blvd.  
Suite G-25  
Anchorage, AK 99503

RE: Winter Flow Test/20% Rhodamine WD Tracer Dye Release  
Crooked Creek (Stream No. 335-20-16600-2671)  
Sections 27 and 33-34, T23N, R49W, SM (Iditarod A-5 Quad)  
Location Coordinates: 62.0453 N, 158.2572 W

Dear Chris Eckert:

Pursuant to AS 16.05.871 (b), the Alaska Department of Fish and Game (ADF&G) Habitat Section has reviewed your proposal for a winter flow test of Crooked Creek.

### **Project Description**

Donlin Gold proposes to conduct a flow test of Crooked Creek using geophysical methods during the winter low flow period in order to map ice thickness, delineate water under ice, identify potential freezing in the hyporheic zone, and identify ice formation on the substrate. A two-kilometer section of Crooked Creek will be surveyed approximately one kilometer each upstream and downstream of the confluence of American Creek with Crooked Creek, using electromagnetics (EM) and ground penetrating radar (GPR). EM survey lines will be spaced approximately every 10 meters while GPR survey lines will be spaced approximately every 100 meters. Preliminary geophysics results will be used to determine locations for ice auger holes to both calibrate the geophysics results and support targeted locations for streamflow measurements. Streamflow will be measured in two or three locations using a current flow meter, and additionally using dye tracer techniques, which will utilize less than one pint of 20% Rhodamine WT. Work is expected to occur between March 14-April 1, 2022. Additional project details are contained in your project description received on February 28, 2022.

### **Anadromous Fish Act**

Crooked Creek has been specified as being important for the spawning, rearing, or migration of anadromous fishes pursuant to AS 16.05.871(a). Crooked Creek provides spawning habitat for coho, Chinook, and chum, rearing habitat for coho and Chinook salmon, and migration habitat for sockeye and pink salmon. Crooked Creek also supports resident fish species including Arctic grayling, Dolly Varden, burbot, and slimy sculpin. 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 16.05.871(d), your project is approved subject to the project description and permit terms.

### **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 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 Maria Wessel at (907) 459-7281 or maria.wessel@alaska.gov.

Sincerely,  
Doug Vincent-Lang, Commissioner



BY: Audra L. J. Brase, Regional Supervisor  
Habitat Section  
Alaska Department of Fish and Game

ecc: John Chythlook, ADF&G SF, Fairbanks  
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Michael Walton, ADNR, Fairbanks  
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