

ALASKA DEPARTMENT OF NATURAL RESOURCES
Water Resources Section

TO: Michael Walton

DATE of Decision: May 24, 2013

FROM: Clint Gundelfinger

FILE Number: TWUP A2013-107

The Temporary Water Use Authorization case file has been reviewed for accuracy and conformance with statutes and regulations. The following comments, recommendations, or corrections are presented.

Check for duplicate water use: None.

Agency Notice:

Dated April 15, 2013.

Deadline for response was 5:00 P.M., April 30, 2013.

Department of Fish and Game: no comment (ADF&G Habitat issued Fish Habitat Permit FH13-III-0124 on April 3, 2013 and Fish Habitat Permit FH13-III-0194 on May 24, 2013).

Department of Environmental Conservation: Charley Palmer commented that "if withdrawal occurs upstream (Little Panguingue Creek) from the road, a possible intersection with the drinking water protection area for PWSID 391540 may occur." (April 15, 2013)

(This comment was reviewed and it is clear that the Little Panguingue Creek water source will be accessed from (downstream of the drinking water protection area) the Parks Highway to facilitate the filling of water trucks/tankers, so no intersection with the protection area will occur. An issued authorization will be subject to conditions to protect the water source(s).)

Denali Borough: In a letter dated April 16, 2013 and signed by Molly McKinley, the Denali Borough wrote that they were "... concerned that the proposed quantity of water to be extracted from Panguingue Creek, Little Panguingue Creek, and the "Gravel Pit, north driveway" will have adverse impacts. In particular, the "Gravel Pit, north driveway" at mile 261 has historically been a stocked fish pond that is commonly used for public recreation. It is likely that its small volume will be significantly diminished by the proposed action. Additionally, neither creek is very large and withdrawing large sums of water seems likely to impact the creeks significantly, particularly during the later summer month when flows naturally diminish." (This comment was reviewed and an issued authorization will be subject to conditions requiring and/or addressing the use of screened intake structures, the monitoring of the screened intake structures; safe pumping operations; stream access; the maintaining of adequate flow and water levels to support indigenous aquatic life and the movement and passage of fish; the potential alteration or disturbance of water bodies; and the protection of the water source. The Alaska Department of Fish and Game, Habitat Division issued Fish Habitat Permit FH13-III-0124 on April 3, 2013 for water withdrawal from Panguingue Creek (ADF&G Stream No. 334-40-11000-2490-3200-4075) and Little Panguingue Creek subject to the conditions that the " water intake structures designed to prevent the intake, impingement, and/or entrapment of fish shall be installed and maintained at each water intake location. The effective screen openings may not exceed 0.25 inches (1/4 inch). To reduce fish impingement on screened surfaces, water velocity at the screen/water interface shall not exceed 0.5 feet per second when the pump is operating." ADF&G Habitat also issued Fish Habitat Permit FH13-III-0194 on May 24, 2013 for the requested unnamed gravel pit pond at MP 261.1 Parks Highway, and this fish habitat permit stated that ADF&G

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Habitat will be consulting with Great Northwest to monitor (relative to a recently placed staff gauge) the water level in the pond and will require cessation of pumping from the pond if it is determined that water level is being affected by water withdrawal activities.)

Unsolicited Comments received from individuals/entities not part of the Agency Notice Process. (AS 46.15.155(d) exempts TWUP applications from the public notice process under AS 46.15.133)

Brian Napier email dated May 22, 2013.

Allen Guggisberg email.

Denali Citizens Council submitted comments in an April 26, 2013 letter. All of these comments, including suggested authorization conditions in the Denali Citizens Council comment, were considered in the review of the TWUP A2013-107 application and the proposed issuance of this authorization. These concerns are addressed through the following discussion.

Effect on fish and game:

No effect on fish and game is foreseen. The proposed water withdrawal is a combined total of 150,000 gallons of water per day (subject to a combined seasonal maximum of 36.83 acre-feet) from Panguingue Creek (ADF&G Stream No. 334-40-11000-2490-3200-4075), Little Panguingue Creek, and an unnamed gravel pit pond at MP 261.1 of Parks Highway. This pond is stocked annually with about 200 sterile rainbow trout, due to the maximum 5-foot depth of the pond and thus the unlikely overwinter survival of any fish in the pond. The Alaska Department of Fish and Game issued Fish Habitat Permit No. FH-13-III-0124 for water withdrawal from Panguingue Creek (ADF&G Stream No. 334-40-11000-2490-3200-4075) and Little Panguingue Creek. ADF&G also issued Fish Habitat Permit FH13-III-0194 for this pond, and will be monitoring the water level in the pond in consultation with Great Northwest. Pumping from the pond will be stopped if pumping unduly affects the water level. A screened structure will surround the water intake(s) and shall be designed so that the effective screen openings may not exceed 0.25 inches and water velocity at the screen surface may not exceed 0.5 feet per second during pump operation. An issued authorization will be subject to conditions requiring the use of screened intake structures, the monitoring of the screened intake structures; safe pumping operations; maintaining stream access; the maintaining of adequate flow and water levels to support indigenous aquatic life and the movement and passage of fish; and the protection of the water source. Therefore, it is unlikely that issuing an authorization for the TWUP A2013-107 application will affect fish and game.

Coastal Issues:

None.

Prior appropriators:

A land information search for case categories 8 within Section 21 T10S R8W Fairbanks Meridian and Sections 27 and 34, T11S, R8W, Fairbanks Meridian shows there are no water right holders of record, no active temporary water use authorizations are currently issued, and one application for temporary water use (TWUP A2013-87). TWUP A2013-87 was submitted by ADOT&PF for the withdrawal of up to 20,000 gpd for up to 10 days per year (200,000 gallons per season) from Panguingue Creek. Due to the limited number of withdrawal days by ADOT&PF and the subject applicant's ability to withdraw from multiple sources no conflict is foreseen. There is an Instream Flow Reservation (LAS 20285) for the Nenana River which receives tributary water from Panguingue Creek and Little Panguingue Creek. The volume of water requested for withdrawal in this TWUP A2013-107 application is a combination of 150,000 gallons per day at maximum 500 gpm which equals 1.1 cfs (also equivalent to 0.23 cubic feet per second averaged over a 24-hour day) from April 22 through October 31 from three

sources, only two of which are tributary to the Nenana River. Continuous water pumping from any of the three sources will only last as long as it takes to fill the water tanks/trucks being used to transport the water to the site of water use. At 500 gpm, a 5,000 gallon tank would be filled in ten minutes. USGS mean of monthly discharge data (USGS gauge 15518040) for the Nenana River upstream from the points of contribution of the tributary sources ranges from 828 cubic feet per second to 11,000 cubic feet per second during the time period for the proposed water withdrawal. The 24-hour average water withdrawal rate (0.23 cfs) in this application represents just 0.028 percent of the lower Nenana River mean of monthly discharge volume and 0.002 percent of the higher Nenana River mean of monthly discharge volume during the April through October time period and therefore represents a de minimus and insignificant fraction of the volume of water flowing in the Nenana River and of the LAS 20285 instream flow reservation. It is also noted that the LAS 20285 instream flow reservation is issued to ADF&G, who issued the above described fish habitat permits for the water sources requested in the TWUP A2013-107 application. Therefore it is unlikely that issuing an authorization for TWUP A2013-107 application will unreasonably affect any prior appropriators.

No water right or priority is established by a temporary water use authorization issued pursuant to 11 AAC 93.220. Water so used is subject to appropriation by others (11 AAC 93.210 (b)). The Department may suspend operations authorized under this authorization whenever such suspension shall in its judgment be necessary to protect the public interest or that of a prior appropriator.

Proposed means of construction:

Adequate. A 6 inch pump attached to a screened water intake structure and hose outputting to a "j-stand" or similar structure for filling water trucks/tankers will be used.

Proposed use of water:

Beneficial. The water will be used for compaction, dust control, and seeding during the Parks Highway construction and rehabilitation project between milepost 252 and milepost 263.

Effect upon access to navigable or public water:

No foreseen effects upon access to navigable water ways or public water. A condition on an issued authorization will address access to the subject water bodies.

It is interpreted that the proposed use of water is in the public interest. Considering the conditions to be placed on any issued TWUP A2013-107 authorization, this file contains no proof of a likelihood of harm to the public interest. Furthermore, it is inferred that the applicant has the intent and ability to complete the project.

Application for Temporary Use of Water to Temporary Water Use Authorization

NECESSARY ACTIONS:

Concurrence : _____ Other : _____

Michelle H. NRM II
Signature DNR, State of Alaska

May 24, 2013
Date _____