

NENANA SUBSISTENCE AREA RIVER DUMP ACTION PLAN



Prepared by

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Introduction

The Yukon River Inter-Tribal Watershed Council's (YRITWC) Brownfields Tribal Response Program was formed in 2005 to assist with the inventory and possible assessment of brownfields in the Yukon River watershed.

The Environmental Protection Agency (EPA) defines a brownfield as 'real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant.'

In Year One of the YRITWC Brownfields Program, twenty tribal governments in the Yukon River watershed expressed interest in completing a brownfield site inventory. The Nenana Native Council was among those entities and in the summer of 2006, the YRITWC Brownfields Program began collaborating with the Nenana Native Council on an inventory. The Nenana inventory identified 7 potential brownfield sites which included the Nenana Subsistence Area River Dump.

In September, the Nenana Subsistence Area River Dump was chosen from among 150 sites, between twenty communities, as one of the two top priority sites for Year One. Each priority site was to receive an Action Plan and Phase I Environmental Site Assessment (see *Appendix D*) through the YRITWC Brownfields Program.

Action Plan Overview

This document is an Action Plan. The general purpose of this Plan is to provide the Nenana community with relevant information to inform future decisions regarding the Nenana Subsistence Area River Dump.

Specific objectives of the Plan include:

- To provide site-specific background and landownership information
- To summarize the major findings of the Phase I Environmental Site Assessment
- To outline recommended actions to address the Nenana Subsistence Area River Dump
- To identify potential funding opportunities for future assessment, cleanup and erosion control

The information contained in this Plan is based on the Phase I Environmental Site Assessment, land title records, and communication with Nenana Native Council staff and the Mayor of Nenana.

The Plan is divided into five sections: *Background, Site Investigation and Findings, Recommended Actions, Potential Funding Opportunities, and Conclusion.*

I. Background

In September of 2006, the YRITWC began working with International Consulting & Engineering (ICE) to complete a Phase I Environmental Site Assessment for the Nenana Subsistence Area River Dump. On September 28, the YRITWC Brownfields Program staff traveled with an environmental professional from ICE to Nenana as part of a site visit. Garreth Edwin, former Director of Environmental Programs for the Nenana Native Council, accompanied us during the site visit and was present during assessment activities.

The Nenana Subsistence Area River Dump is an approximately 30 acre site located along the bank of the Tanana River. The site is bordered by the Alaska Railroad to the west, the Airport to the south, the Tanana River to the east and the City of Nenana to the north.

The legal description for the site is: *Township 4 South, Range 8 West, Fairbanks Meridian, Alaska, Sections 13 and 24, Blocks 8, 9, 10, 11, 12, 13, 68, 69, and 70.* According to the City of Nenana, the site consists of several parcels with multiple landowners as demonstrated by the aerial photograph below.



- Site boundaries
- Parcel boundaries (approximate)

- **Blocks 8-13:** Nenana Native Council
- **Block 68:**
 - Lot 1: Pat Kalen
 - Lot 2: Steve Ketzler
 - Lots 3 & 4: Steve Bainbridge
- **Blocks 69-70:** Sharon Clark

Figure 1: Aerial photograph of site. Photograph by Aero-Metric, Inc.

Due to the large number of parcels, review of land title records (see *Appendix 18.4 of Phase I report*) was limited to *Block 70* which is the largest single parcel and also the area where most of the findings were concentrated (e.g., ferry, 12-volt lead acid batteries, and 55-gallon drums).

The site is currently vacant. The primary uses include camping associated with subsistence activities, river access for small boats and picnicking. The site is also being used as a storage area for riprap used for controlling river erosion.

The proximity of the site to the Tanana River is also of significance. The River has and continues to be an area of heavy subsistence activity. According to information from the Alaska Division of Community Advocacy, 47.3% of the Nenana community is Alaska Native or part Native and the majority of Native households currently rely on subsistence foods such as salmon, moose, caribou, bear, waterfowl and berries. This point is well supported by the many fish wheels visible along the Tanana River.

II. Site Investigation and Findings

According to Mr. Edwin, dumping at the site dates back over twenty years. Mr. Edwin reported that attempts were made to cleanup the site in 2005 when two employees of the Nenana Native Council removed an unknown quantity of top soil and transported it to the landfill.

At the time of the site visit, various solid wastes and potentially hazardous wastes were observed in the area. Findings included the discovery of an old car ferry, crushed automobiles, engines, scrap metal, discarded 55-gallon drums and 12-volt batteries.

The following section is a detailed summary of the observations documented in the Phase I report.



Paddlewheel and vehicle carcasses. Photo by YRITWC.

- *There were several 55-gallon drums under and around the ferry. It could not be determined if there was any material in the drums. There were also two broken 12-volt lead batteries disposed of beside the ferry.*
- *In several areas 55-gallon drums were observed. Most had been damaged and some had liquids inside them.*
- *In several areas within the wooded area there were what appeared to be soil piles. They may have been debris piles and also areas where wastes were disposed of and covered up.*
- *Two crushed car bodies had also been disposed of in the area. The batteries had been removed from the vehicles, but the engines were still intact and appeared to have fluids remaining in them. There was also an abandoned paddlewheel in the area. This may be connected to the ferry.*
- *Several areas appeared to have dead vegetation. These were in the area of the crushed vehicles and the ferry. The damage to the vegetation could have resulted from a recent frost or it could be that substances from the ferry, drums, batteries or crushed vehicles are responsible.*

The concluding opinion of the environmental profession in the Phase I report was, “*Potential contamination at the site is dispersed. There are likely some detectable petroleum hydrocarbons associated with the vehicle carcasses and possibly contained in the 55-gallon*

drums that were observed at the site. It is possible that lead contamination may be locally present in the vicinity of the 12-volt lead acid batteries observed at the site.” Based on this information, we identified three recommended actions to help guide the Nenana community in making future decisions regarding the Nenana Subsistence Area River Dump.

III. Recommended Actions

Action 1: Further assessment

The Phase I report concluded that additional investigation should be undertaken at the site. Such an investigation could include the following activities.

- Draft a site plan which locates and identifies potential sources of contamination.
- Obtain permission from landowners to sample at site.
- Collect soil samples from areas near the 12-volt batteries and analyze samples for lead contamination.
- Collect batteries and transport to a battery recycler for property disposal or recycling.
- Sample 55-gallon drums around the ferry for Resource Conservation and Recovery Act (RCRA) characteristics and also analyze for relevant State of Alaska regulated petroleum contaminants like Gasoline Range Organics, Diesel Range Organics, Residual Range Organics and Lead.
- Check vehicle carcasses for fluids and observe for petroleum contamination in the vicinity.
- Plan to remove vehicle carcasses from the site. Possibly consult with the YRITWC BackHaul Program.



55-gallon drums near ferry. Photo by Simon Mawson

Information on funding further assessment activities is included in the *Potential Funding Opportunities* section.

Action 2: Strengthen redevelopment goals

Nenana currently has several community plans however, to our knowledge, none specify redevelopment goals for the site. Strong redevelopment goals could help enhance the site’s potential as a brownfield project. They could also provide early insight into the appropriate cleanup level. For example, a site where the planned reuse is a storage area/facility may not be held to the same cleanup standard as if the planned reuse was a school or residential area.

In our discussions with Nenana Native Council staff, several redevelopment ideas were articulated which included leasing the property for campsites and/or developing the property for tribal housing or assisted living facilities. The fact that the site is also inclusive of other property owners makes it essential that they and other stakeholders be presented an opportunity to engage in the formulation of redevelopment goals. The following outlines a

process designed to support the strengthening of redevelopment goals for the Nenana Subsistence Area River Dump.

- Identify current landowners
- Identify possible stakeholders (This may include Golden Valley Electric Association, Municipality of Nenana, and the Alaska Railroad Corporations who, according to the land title records, maintain easements on the property. Other stakeholders to consider may be local businesses, government representatives, etc.)
- Organize a community planning session(s) and invite landowners and stakeholders to discuss ideas for potential redevelopment goals
- Review the current easements paying attention to any restrictions that could impact future redevelopment
- Update community plan(s) to include redevelopment goals

Action 3: Erosion control

One of the concerns regarding the redevelopment potential of the area is active erosion along the bank of the Tanana River. According to the Phase I report, “*The property sloped steeply to the river and the water which was about 15-feet below the site elevation at the time. Some areas of the riverbank seemed particularly susceptible to erosion and Mr. Edwin mentioned that as much as 30-feet of bank had been lost this year (2006).*”



Bank of the Tanana River. Photo by Simon Mawson.

The community was reported to have worked on an erosion project several years ago. The current status of the project is unknown however, as previously stated, rip rap used for controlling river erosion is stored at the site. Continuing to address the erosion problem will be key to protecting the redevelopment potential of the site.

For more information on erosion control funding see the *Potential Funding Opportunities* section.

IV. Potential Funding Opportunities

There are several potential funding opportunities for assessment, cleanup and erosion control. The most common sources are summarized below.

Assessment Funding

Targeted Brownfield Assessments

A Targeted Brownfield Assessment (TBA) is a site-specific study to determine the nature and extent of contamination. TBA's are available through the EPA. The value of EPA TBA's is approximately \$50,000. TBA's are available to public, quasi-public or non-profit entities interested in redeveloping abandoned or underutilized properties (see *Appendix B for TBA Site Questionnaire*). For more information visit: <http://www.epa.gov/swerosps/bf/tba.htm>.

DEC Brownfield Assessment (DBA)

The Alaska Department of Environmental Conservation (DEC) helps eligible applicants (city and borough governments, villages, tribal councils, Native corporations, and non-profits) identify environmental conditions that may preclude development at their properties through our DEC Brownfield Assessments (DBAs). This service identifies contamination at a property, summarizes how the contamination may limit future use, and provides an estimate of cleanup costs. DEC conducts several DBAs each year, using brownfield funding from EPA. (See *Appendix C for DEC Brownfield Assessment Fact Sheet and Request Form*). For more information visit: <http://www.dec.state.ak.us/SPAR/csp/brownfields.htm#assess>.

EPA Brownfields Assessment Grants

EPA Brownfields Assessment Grants are a competitive grant. An eligible entity may apply for up to \$200,000 to assess a site contaminated by hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum) and up to \$200,000 to address a site contaminated by petroleum. For site specific proposals, applicants may seek a waiver of the \$200,000 limit and request up to \$350,000 for a site contaminated by hazardous substances, pollutants, or contaminants and up to \$350,000 to assess a site contaminated by petroleum. The performance period for an Assessment Grant is 3 years. For more information visit: http://www.epa.gov/swerosps/bf/assessment_grants.htm.

State & Tribal Response Program

All federally recognized Tribes, including Tribes in Alaska are eligible to request funding under the Brownfields State and Tribal Response Program. The goal of this funding is to ensure that tribal response programs include certain elements that help build program capacity to address and manage contaminated lands. Individual request may be made up to \$1.5 million to cover a one year project period. For more information visit: http://www.epa.gov/swerosps/bf/state_tribal.htm.

Cleanup Funding

EPA Cleanup Grants

EPA Cleanup Grants may be awarded up to \$200,000 per site for cleanup. Due to budget limitations, no entity may apply for funding cleanup activities at more than three sites. Applicants must submit a separate proposal for each site. The performance period for a Cleanup Grant is 3 years. By statute, cleanup grant recipients and revolving loan fund subgrant recipients must own these sites at the time of grant or subgrant award. For purposes of grant eligibility and the guidelines only, ownership is fee simple title. Other arrangements may be considered on a case-by-case basis. For more information visit: http://www.epa.gov/swerosps/bf/cleanup_grants.htm.

Erosion Control Funding

Alaska Baseline Erosion Assessment

The U.S. Army Corps of Engineers is conducting a study to provide an overall assessment of erosion in the State of Alaska. The Corps, working with the State, Federally recognized Tribes, and other stakeholders, is developing this baseline study to provide a measured assessment of erosion issues in Alaska. This study will provide communities affected by erosion with an estimated erosion rate map, potential recommendations, and guidance for implementation on ways they can address their concerns. For more information visit: <http://www.alaskaerosion.com/>.

V. Conclusion

Implementing this Action Plan will require a degree of commitment from the city and tribal governments as well as other stakeholders. Often the most successful brownfield projects are those that have the support of local people and entities who are willing to “champion” the project and keep interest in it ongoing. Taking action to address the various environmental concerns associated with the Nenana Subsistence Area River Dump could result in many community benefits.

Appendix A

Resource Contacts

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