

Last Chance Wastewater Treatment Plant



March 12, 2024

FORSGREN
Associates Inc.

Agenda

- Project Overview
- Operational Changes
- Treatment Process
- Points of Discharge



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Project Overview

- Facility Planning Study completed in 2021
- New wastewater discharge is no longer a permittable use on public lands
- County has exceeded permit limitations for hydraulic loading, total coliforms on current discharge permit
- Received ARPA dollars to upgrade existing lagoon system to mechanical treatment plant to be spent by end of 2026
- Applied to IPDES for a river discharge permit



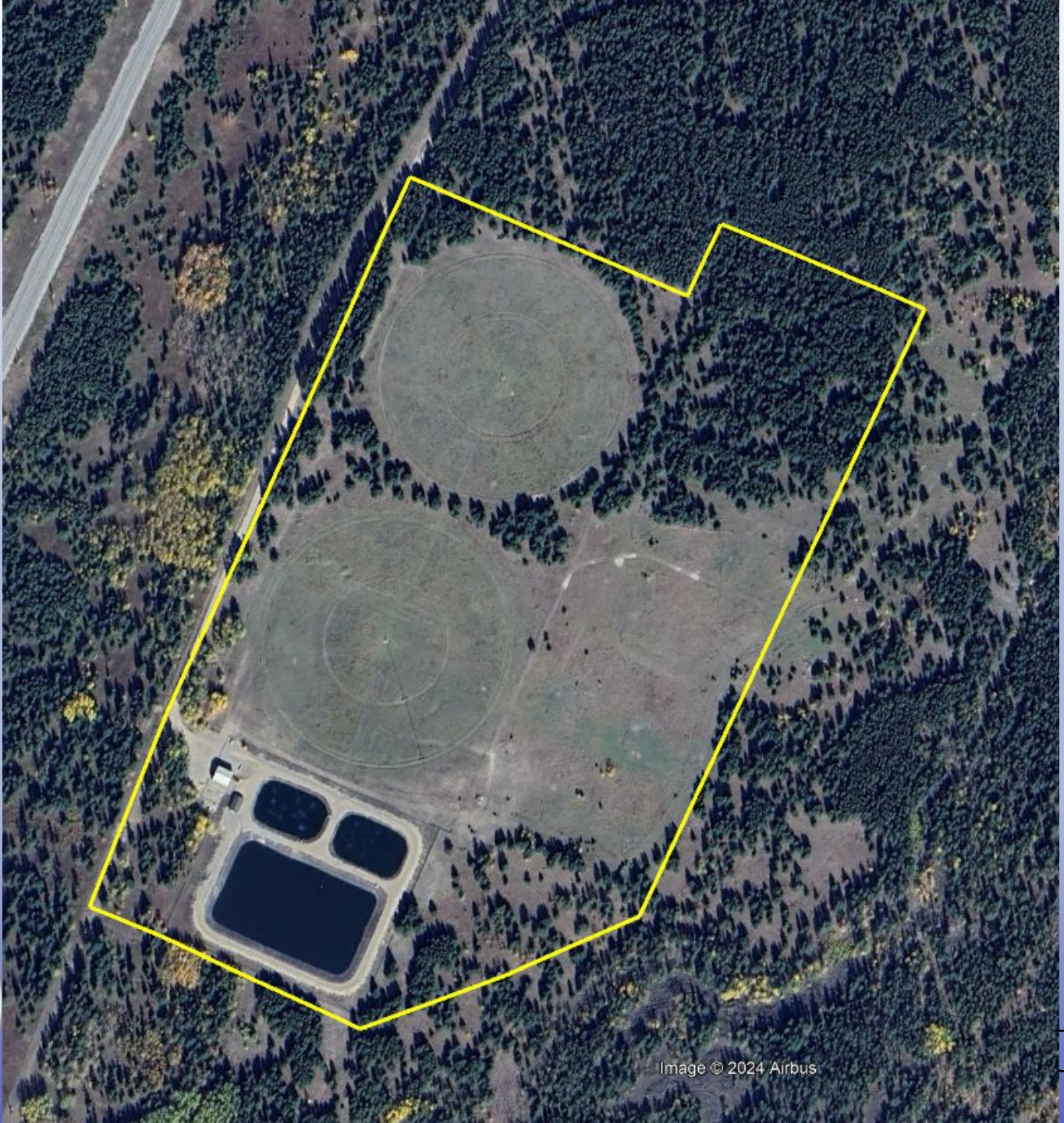
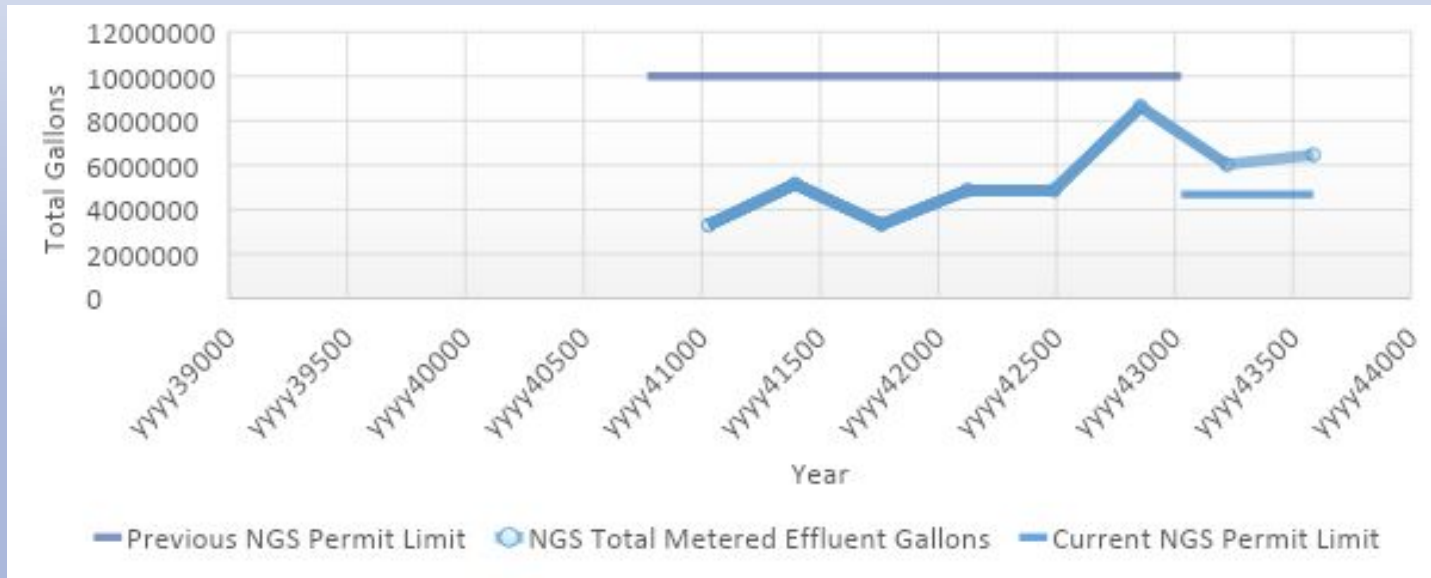


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Operational Changes



Design Criteria

Design Flows (based on 20-year build-out):

Summer Design Flows	Flow Rate
Maximum Month Flow Rate	0.13 MGD
Peak Hour Flow Rate	0.32 MGD
Average Flow Rate	0.11 MGD
Winter Design Flow	
Average Flow Rate	0.037 MGD

Projected Effluent Discharge Concentrations:

Parameter	Units	Concentration
BOD5	mg/l	10
TSS	mg/l	10
pH		6-9
Total Nitrogen	mg/l	10
Ammonia	mg/l	0.5
Turbidity	NTU	2.0
Phosphorus	mg/l	4



Treatment Process

Existing

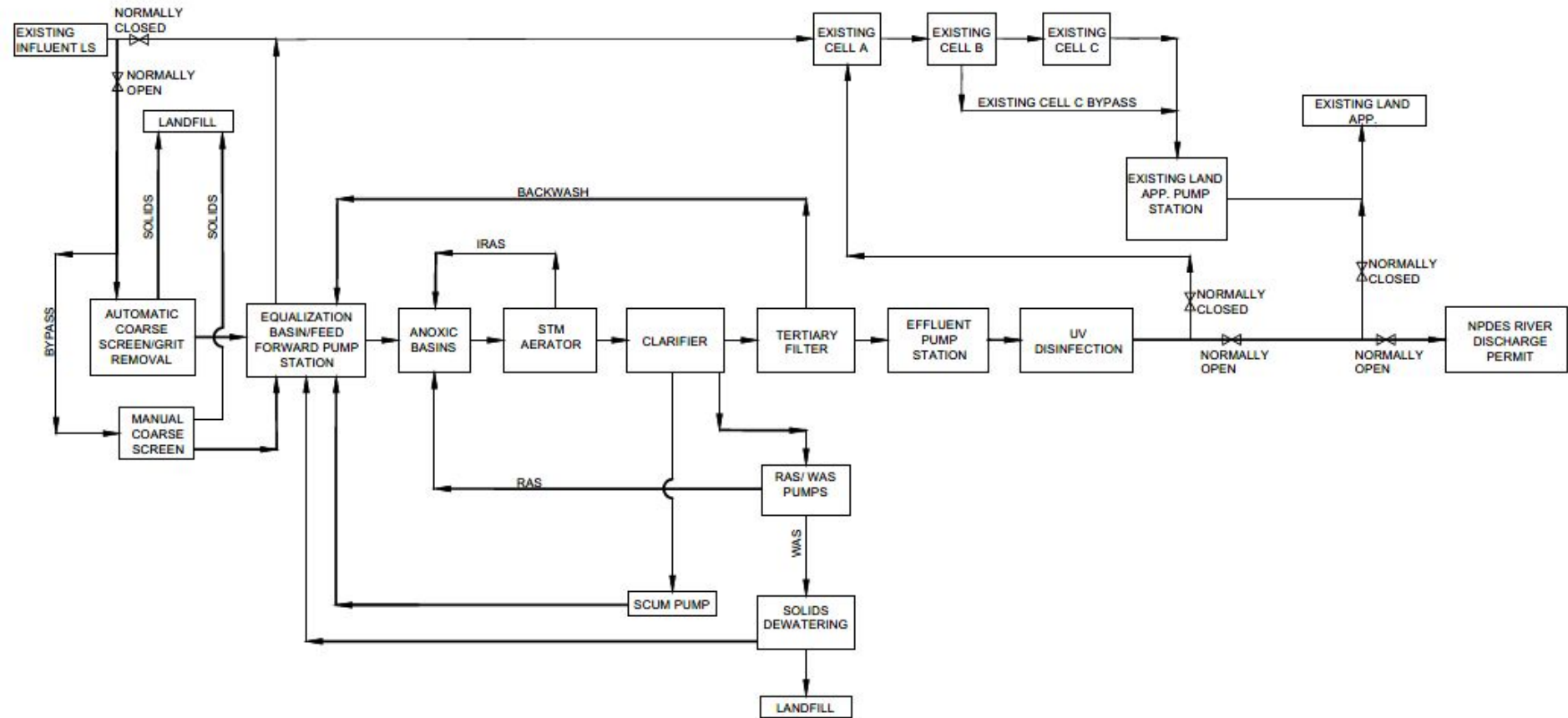
- Aeration
- Clarification
- Disinfection

Proposed

- Screening
- Grit Removal
- Integrated Fixed Film Activated Sludge Process
- Clarification
- Filtration
- UV Disinfection



Treatment Process

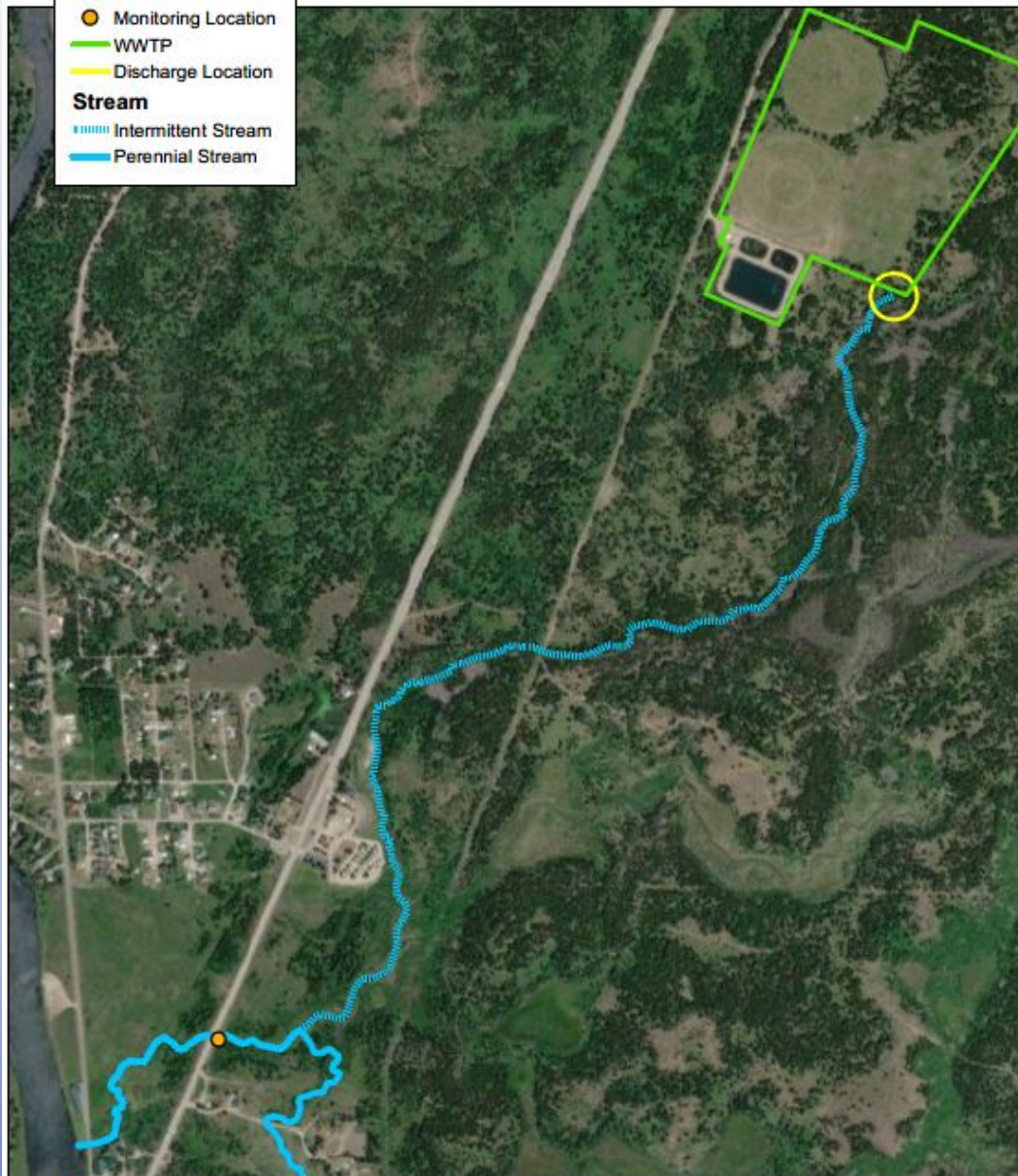


Legend

- Monitoring Location
- WWTP
- Discharge Location

Stream

- Intermittent Stream
- Perennial Stream



Stream Discharge Location

0 0.1 0.2 0.4 Miles



Information as displayed on map is for Planning Purposes only. The data is approximate in terms of content and location and has been sourced from local, state, and national government agencies. Please contact Forsgren Associates Inc. with questions.

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June 2023

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Phosphorus Loading (kg/year)

Land Application with Growth	907
Proposed Discharge	403

