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# **ENVIRONMENTAL ASSESSMENT AGRIUM U.S., INC.**

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### APPENDIX B – RELATED PERMITS

1. Nation Wide Permit 3 – 98-2-00686
2. Hydraulic Project Approval 00-d0698-01
3. State Historical Preservation Officer Authorization
4. Certificate of Compliance with Dept. of Army Permit

### APPENDIX C – SCREENING REQUIREMENT INFORMATION

## **2.1 Project Description**

The Finley Area has a dock and a cooling water intake and return. The cooling water intake is a pump station on the Columbia River that is set back from the normal shoreline and has a "fore bay". The cooling water return is diffused through a 60" diameter pipeline extending out 600 feet on the riverbed. Sand and silt accumulate in the pump station fore bay and decrease the efficiency of the pump station. Once per year the accumulated sediment needs to be removed.

The Kennewick Area has a dock and cooling water intake and discharge lines on the riverbed. The cooling water intake is a 30" diameter pipeline extending out 130 feet on the riverbed while the return is a 42" diameter pipeline extending out 320 feet on the riverbed.

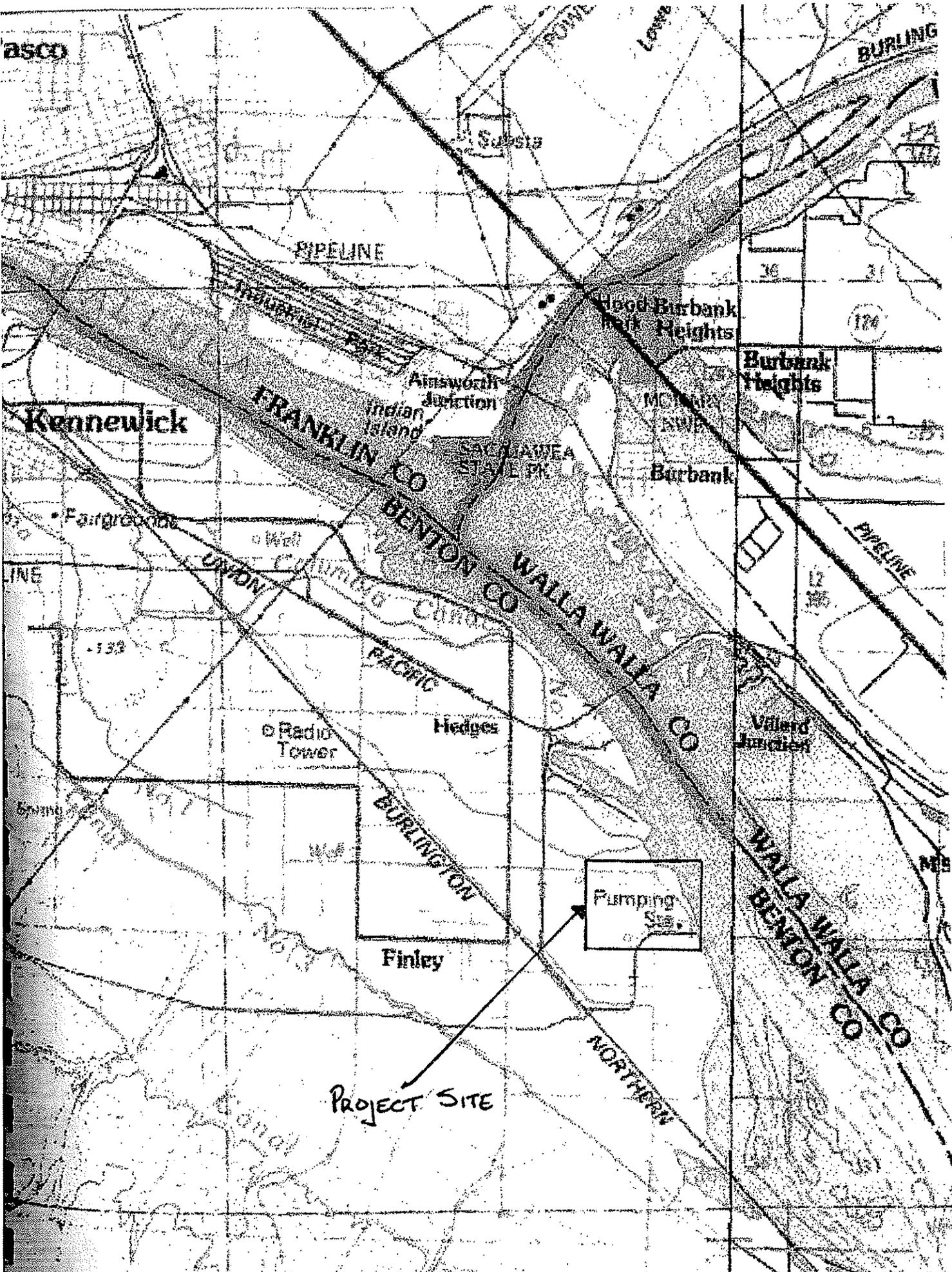
The Hedges Area has a dock. The dock is designed to ship and receive liquid ammonia and dry fertilizer product.

The dock has a 12" and 6" Ammonia loading arm for connection to bulk tanker barges and part of the minor maintenance includes re-painting to prevent corrosion and to maintain it in good working order. This is a minor job and would have low to no impact to surrounding water and only needs to be done every 20 years.

### **2.1.1 Methods of Work**

This is an ongoing project performed yearly. Agrium, Inc. looked at two options of removing the sediment build-up from the Cooling Water Intake Forebay. One was dredging the material with a mud cat barge and piping the material to the designated site. The second method was using divers controlling a hand-held suction hose along the bottom.

The hand held hose was chosen as the preferred option because the divers had a tighter control of the dredge hose. This is critical, since the plant intake pumps are still operating and this method minimized the quantity of disturbed silt that could potentially be pulled into the intakes. The diver method also reduces the silt cloud around the suction line and minimizes impacts to the environment and allows the project to stay within HPA and NWP permit requirements.



asco

BURLING

PIPELINE

Substa

76

31

170

Hood Burbank  
Heights Heights

Burbank  
Heights

Ainsworth  
Jurisdiction

Indian  
Island

SACRAMENTA  
STAMP PN

MONTANA  
SWP

Burbank

Kennewick

Fairgrove

FRANKLIN CO

BENTON CO

WALLA WALLA CO

PIPELINE

LINE

133

Well

Radio  
Tower

Hedges

Wallard  
Junction

67210

BURLINGTON

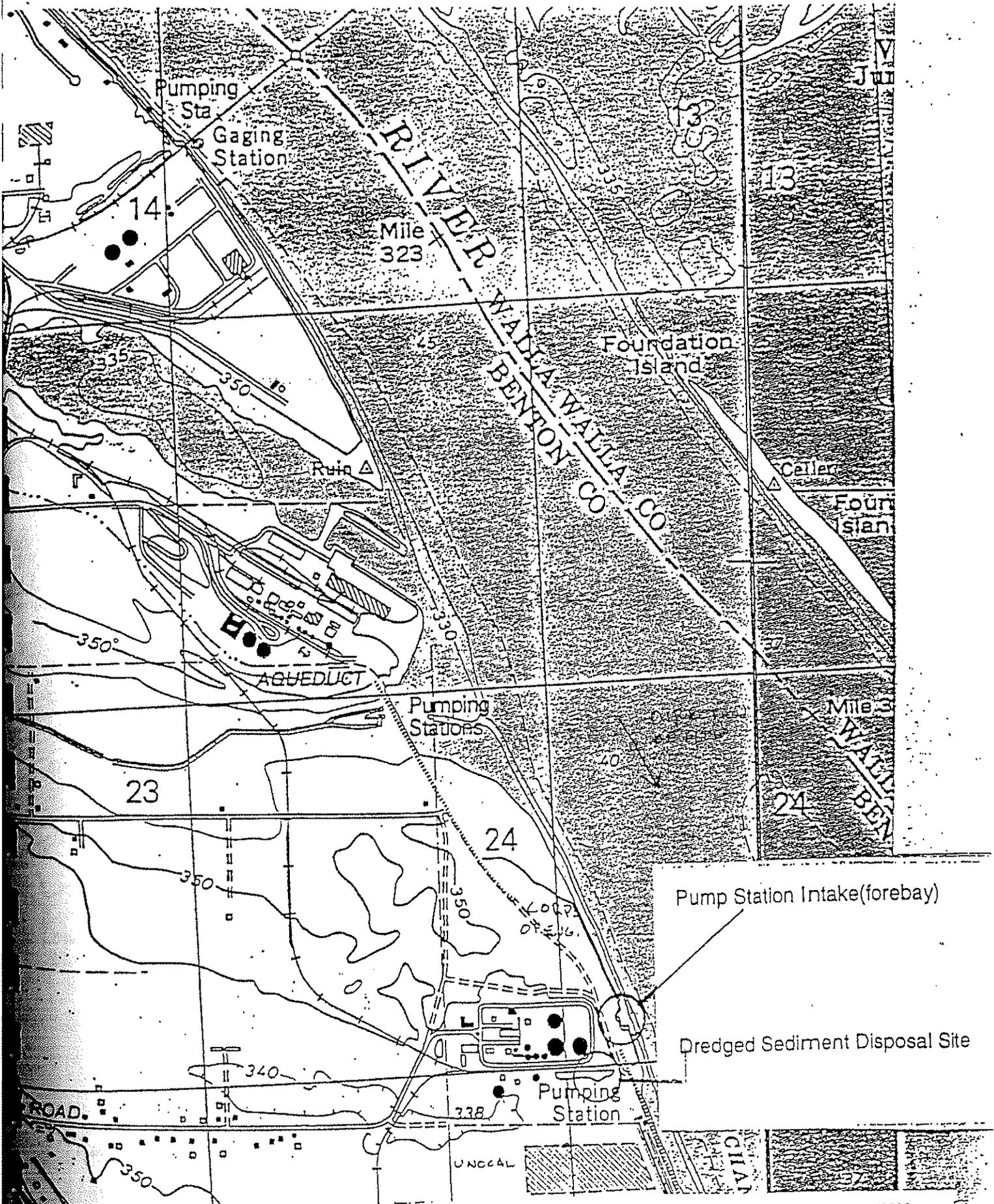
Pumping  
Sta.

Finley

WALLA WALLA CO  
BENTON CO

PROJECT SITE

NORTHERN



Pump Station Intake (forebay)

Dredged Sediment Disposal Site

Purpose: Remove accumulated Sediment around intake pipe

Datum: Normal Pool=340 ft

Reference: 98-2-00686  
 Proposed: 5-year dredge  
 In: Columbia River  
 Near: Kennewick, WA  
 County: Benton  
 Applicant: Unocal Agricultural Products



The actual work methods include the use of a barge-mounted suction pump (three pumps) connected to a 4-inch diameter by 16 foot long hydraulic suction hose, hand-operated by divers. The barge is secured to the north/south shorelines by cable line. The divers move along the bottom, guiding the suction hose by hand and removing excess silt. The divers work slow and methodical with minimal disturbance, since they must maintain visibility. This process is repeated until the desired quantity of silt is removed. The transport pipeline carries the dredged material to the nearby burned field where the water is released and allowed to settle.

The dredged material consists of approximately 75% coarse basaltic sand and 25% fine silt (estimate). The use of three pumps and the divers minimizes the silt plume, which is approximately 30' in diameter. Little or no material moves into the river current. None of the dredged material returns to the river, as all of it is reclaimed for agricultural practices.

Minimal disturbance to stream bottom and maintaining water clarity are part of the quality control methods of this project for the reasons described in the preceding paragraph. The work activity is also regularly monitored by project supervisor and permit facilitator to ensure permit compliance and safe operating conditions.

There is some noise and vibration created by the operation of the suction lines, but the impacts to the listed species should be minimal.

### **2.1.2 Water Intake Structure Site**

Environmental impacts will be minor and will be mitigated after the Maintenance Activity phase is completed (see section 6.0, Mitigation). No wetlands will be impacted or disturbed (Drawing 2).

### **2.1.3 Dredged Material Distribution Site**

The materials removed (dredged) from the fore bay site consist primarily of sand, silt. The material is transported from the fore bay site by 4" aluminum pipe and spread as farming reclaim material on an approved land site belonging to Agrium. No materials are returned to the river.

## **3.0 AFFECTED ENVIRONMENT**

### **3.1 Soils**

The shoreline adjacent to the pump plant is mostly sand and list, some scattered cobblestones, which are mostly eolian sands or glacial outwash. The typical profile is river cobble and rock with minimal soils. This soil is grayish-brown loamy fine sand produced from parent materials of granite, quartz and basalt.

### **3.2 Vegetation**

Most of the water intake structure site consists of disturbed open spaces that are sparsely vegetated. Native plant communities are degraded or no longer exist in the open spaces surrounding the water intake. A general survey of the area concluded that a majority of the vegetative cover in the open space are invasive exotic forbs and grasses, such as cheat grass (*Bromus tectorum*).

### **3.3 Wildlife**

Wildlife in the Finley project area consists primarily of species that use relatively disturbed habitat and tolerate human activity (roads and work sites). The number of different species that inhabit or temporarily use this site is minimal. Any wildlife associated with this site would be mostly transitory movement from and along that body of water. Examples would be gull and waterfowl flights passing over the project area in route to other locations, or the occasional water birds swimming in the vicinity, such as coots (*Rallidae fulcinae*), and grebes, spp. Occasional beaver (*Castor canadensis*), muskrat (*Ondatra zibethica*) and weasel (*Mustela* sp.) may move through or forage along the shoreline. Bird species would be local species such as sparrows, spp., western meadowlark (*Sturnella neglecta*), robin (*Turdus migratorius*), starling (*Sturnus vulgaris*), and similar species. The work site is an insignificant wildlife site. No in-water work occurs under this NPW3 at the Hedges or Kennewick site, and only includes mechanical repair and spot painting.

### **4.0 POTENTIAL IMPACTS**

Work activities are not likely to adversely affect local wildlife species. All maintenance activities will be closely monitored and any adverse impacts will be mitigated.

### **5.0 PROJECT MONITORING**

The activity area will be closely monitored while the maintenance activity is occurring. Best Management Practices (BMP's) have been included in Agrium's maintenance plan and Agrium will monitor the site. Any unanticipated impacts to the local environment will be corrected immediately.