

GEOGRAPHICAL RESPONSE PLAN

KEYSTONE PIPELINE SYSTEM

FOR TRANSCANADA PIPELINE USE ONLY

Not controlled when printed.

Updated 2021

CARBERRY (MB) AREA

RESPONSE SUMMARY

This Geographic Emergency Response Plan (GRP) is a component of the Keystone Emergency Response Plan (ERP). Information herein does not supersede any component of the ERP.

The purpose of this plan is to facilitate expedited and efficient emergency response operations to protect people the environment within the Assiniboine Delta Aquifer.

This plan should be referenced as a guide only during emergency response. All actions should be modified to meet the demands of a specific incident. This plan does not direct actions, but merely serves as a resource to responders.

All responders using this plan should ensure the TransCanada First Responder Checklist is completed before implementing this plan.

Recommendations in this GRP may be applied to releases from TransCanada's Keystone Pipeline in the Rapid City Section RPDCT+25_1 to the Wellwood Section WELWD+23_2.

The Carberry Geographic Response Plan is centered on the Assiniboine Delta Aquifer where the TransCanada Keystone Pipeline crosses. The ADA is a freshwater bearing deposit of sand and gravel lying below 1500 square mile area centered around Carberry. The aquifer is approx. 50 miles across and up to 140ft deep; it has an average saturated thickness of 45ft and a max of 100ft. The depth from ground surface to the aquifers water table ranges from zero to a maximum of 70ft. The ADA contains approximately 12,000,000 acre-feet of water and approximately 2,200 urban and 7,400 rural residents live in this area and all depend on the aquifer for the water supply.

The ADA is unconfined by any overlying impermeable layers. The west side of the aquifer rests on a glacial till, the remainder of the aquifer rests on a layer of silt and clay covering the till. A significant portion of this area is crown land and is kept in its natural condition. The soils are coarsely textured and allow the majority of the precipitation to infiltrate into the ground. The majority of runoff from waterways in this area comes from the aquifer via springs located in their channels and banks where it's eroded below the water table. The municipalities within this GRP are Langford, North Cypress and North Norfolk.

The Keystone Pipeline intersects 38.30km of the ADA through the four sub-basins at the northern portion of the ADA (Upper Whitemud East, Upper Whitemud West, Lower Whitemud East and Pine Creek North). This portion of the pipeline lays horizontally at 0.8-1.2m below grade, with the exception of all crossings (i.e. Roads, ditches, creeks, utilities etc.) where the depth to cover will increase to 2m below grade.

Culturally and environmentally sensitive receptors need to be protected and preserved in the unlikely event of a release. These receptors have been identified through publically available data from both federal and provincial agencies within a 500m buffer of each source and tactical control points. The Pine Creek/Whitemud River Tactical Plans include a list of all environmental and cultural receptors for each control point. The identified receptors include aquifers, water wells, historic sites, environmentally sensitive areas, aboriginal reserves, soil type, drainage pathway and species of concern.

Below is a table showing all species of concern for both federal and provincial status. Each species are ranked as endangered, extirpated, threatened, of special concern or not listed. The definitions of these classifications are as follows:

Endangered: A wildlife species facing imminent extirpation or extinction

Extirpated: A wildlife species that no longer exists in the wild in Canada, but exists elsewhere

Threatened: A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction

Special concern: A species is of special concern because of characteristics that make it particularly sensitive to human activities or natural events.

Not listed: A species for which there is insufficient scientific information to support status designation.

Wildlife Species	SARA Status	Provincial Status	Ecoregion
Mammals			
Mule or Black-tailed Deer	not listed	threatened	lake Manitoba plain/ Aspen Parkland
Birds			
Burrowing Owl	endangered	endangered	lake Manitoba plain/ Aspen Parkland
Canada Warbler	threatened	endangered	lake Manitoba plain/ Aspen Parkland

Chimney Swift	threatened	threatened	lake Manitoba plain/ Aspen Parkland
Piping Plover	endangered	endangered	lake Manitoba plain/ Aspen Parkland
Common Nighthawk	threatened	threatened	lake Manitoba plain/ Aspen Parkland
Yellow Rail	special concern	not listed	lake Manitoba plain/ Aspen Parkland
Golden-winged Warbler	threatened	threatened	lake Manitoba plain/ Aspen Parkland
Loggerhead Shrike	endangered	not listed	lake Manitoba plain/ Aspen Parkland
Red-headed Woodpecker	threatened	threatened	lake Manitoba plain/ Aspen Parkland
Short-eared Owl	special concern	threatened	lake Manitoba plain/ Aspen Parkland
Sprague's Pipit	threatened	threatened	lake Manitoba plain/ Aspen Parkland
Whip-poor-will	not listed	threatened	lake Manitoba plain/ Aspen Parkland
Bobolink	not listed	not listed	lake Manitoba plain/ Aspen Parkland
Horned Grebe	not listed	not listed	lake Manitoba plain/ Aspen Parkland
Least Bittern	threatened	endangered	lake Manitoba plain/ Aspen Parkland
Olive Sided Fly Catcher	threatened	not listed	lake Manitoba plain/ Aspen Parkland
Rusty Blackbird	special concern	not listed	lake Manitoba plain/ Aspen Parkland
Whooping Crane	endangered	endangered	lake Manitoba plain/ Aspen Parkland
Barn Swallow	not listed	not listed	lake Manitoba plain/ Aspen Parkland
Baird's sparrow	not listed	endangered	lake Manitoba plain/ Aspen Parkland
Ferruginous Hawk	threatened	endangered	lake Manitoba plain/ Aspen Parkland
Amphibians			
Northern Leopard Frog	special concern	not listed	lake Manitoba plain/ Aspen Parkland
Fish			
Silver Chub	special concern	not listed	lake Manitoba plain/ Aspen Parkland
Arthropods			
Dakota Skipper	threatened	threatened	lake Manitoba plain/ Aspen Parkland
Monarch Butterfly	special concern	not listed	lake Manitoba plain/ Aspen Parkland
Uncas Skipper	not listed	endangered	lake Manitoba plain/ Aspen Parkland
Reptiles			
Common Snapping Turtle	not listed	not listed	lake Manitoba plain/ Aspen Parkland
Prairie Skink	endangered	not listed	lake Manitoba plain/ Aspen Parkland
Western Hognose Snake	not listed	threatened	lake Manitoba plain/ Aspen Parkland
Vascular Plants			
Small White Lady's-slipper	endangered	endangered	lake Manitoba plain/ Aspen Parkland
Western Silvery Aster	not listed	threatened	lake Manitoba plain/ Aspen Parkland
Western Ironweed	not listed	endangered	lake Manitoba plain/ Aspen Parkland
Smooth Goosefoot	threatened	endangered	lake Manitoba plain/ Aspen Parkland
Rough Agalinis	endangered	endangered	lake Manitoba plain/ Aspen Parkland

**Disclaimer: if a species is not listed in on either provincial status or on SARA, it is listed on COSEWIC as a species at risk*

A TransCanada Environmental Specialist will be responsible for managing environmental matters associated with incident response operations, including: environmental assessment; permitting; environmental monitoring and damage assessment; and sensitive habitat and wildlife protection and rehabilitation

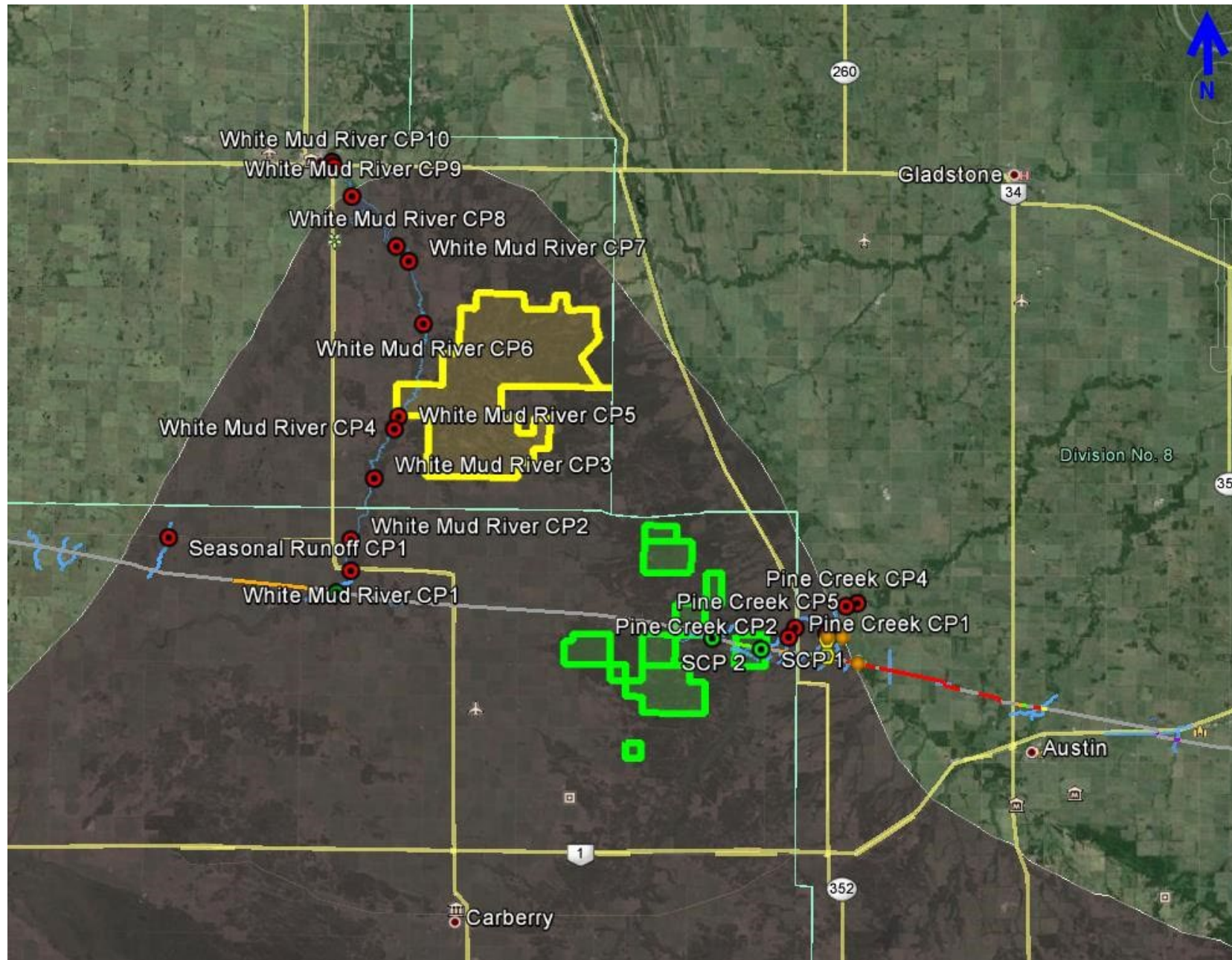
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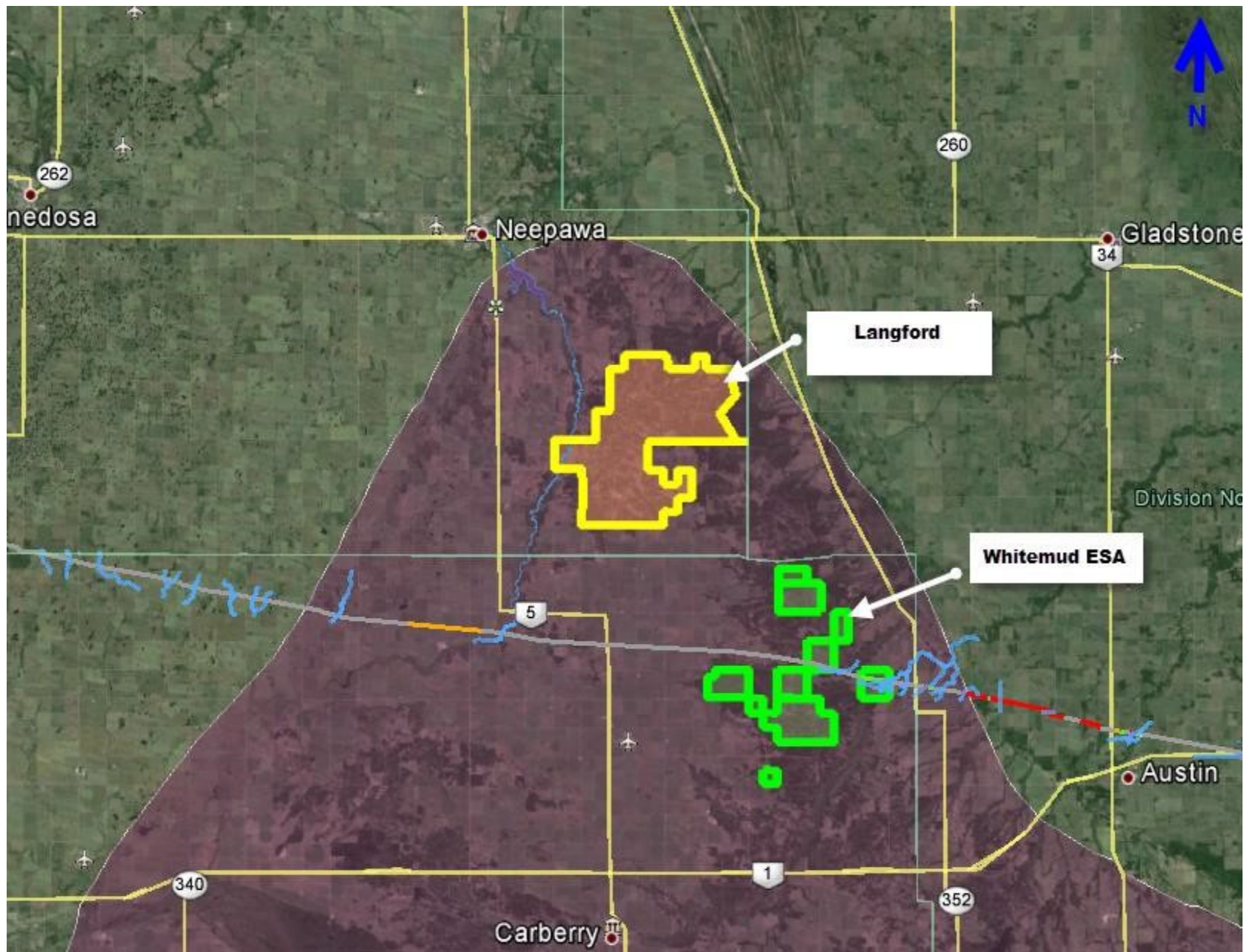
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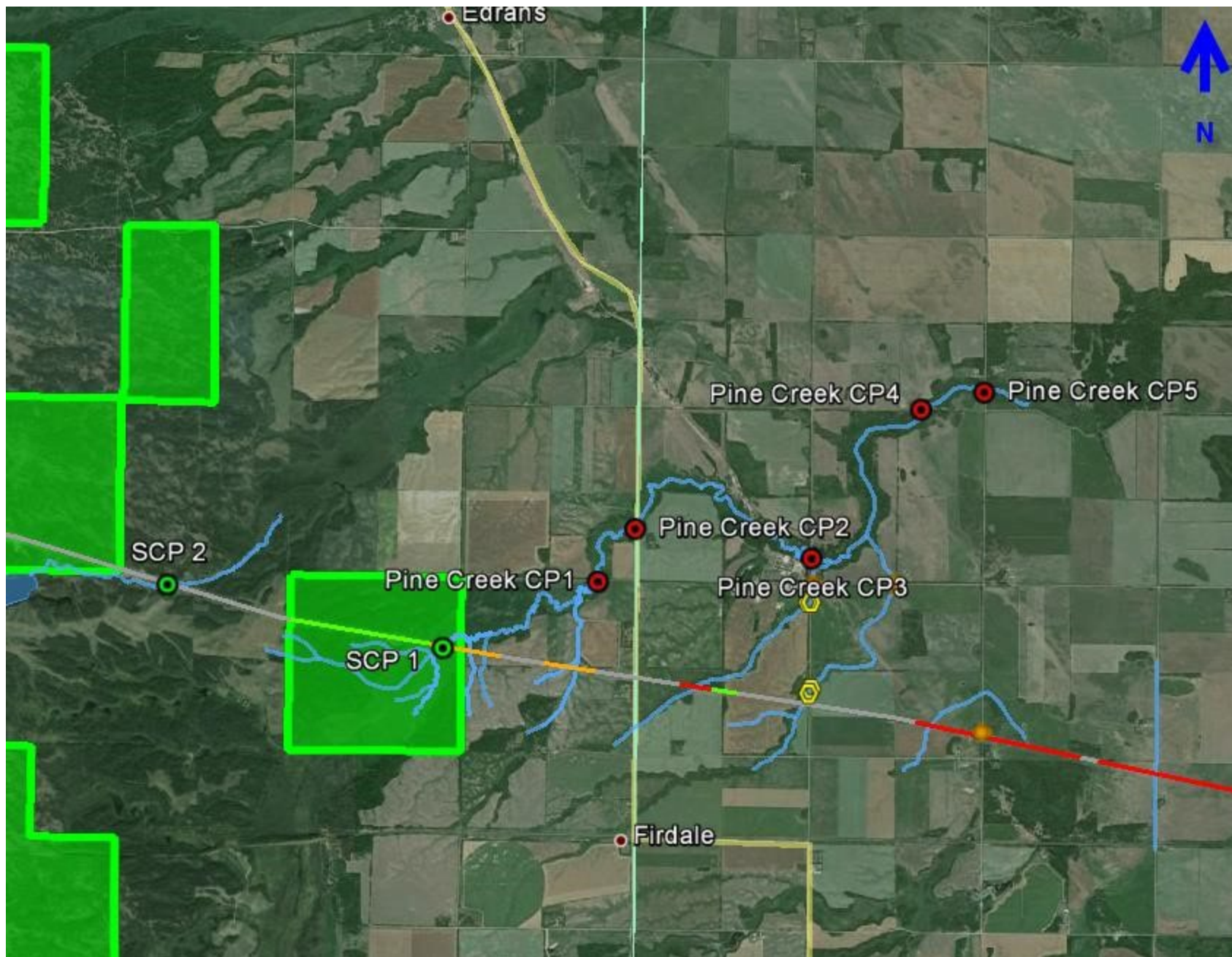
MAPS



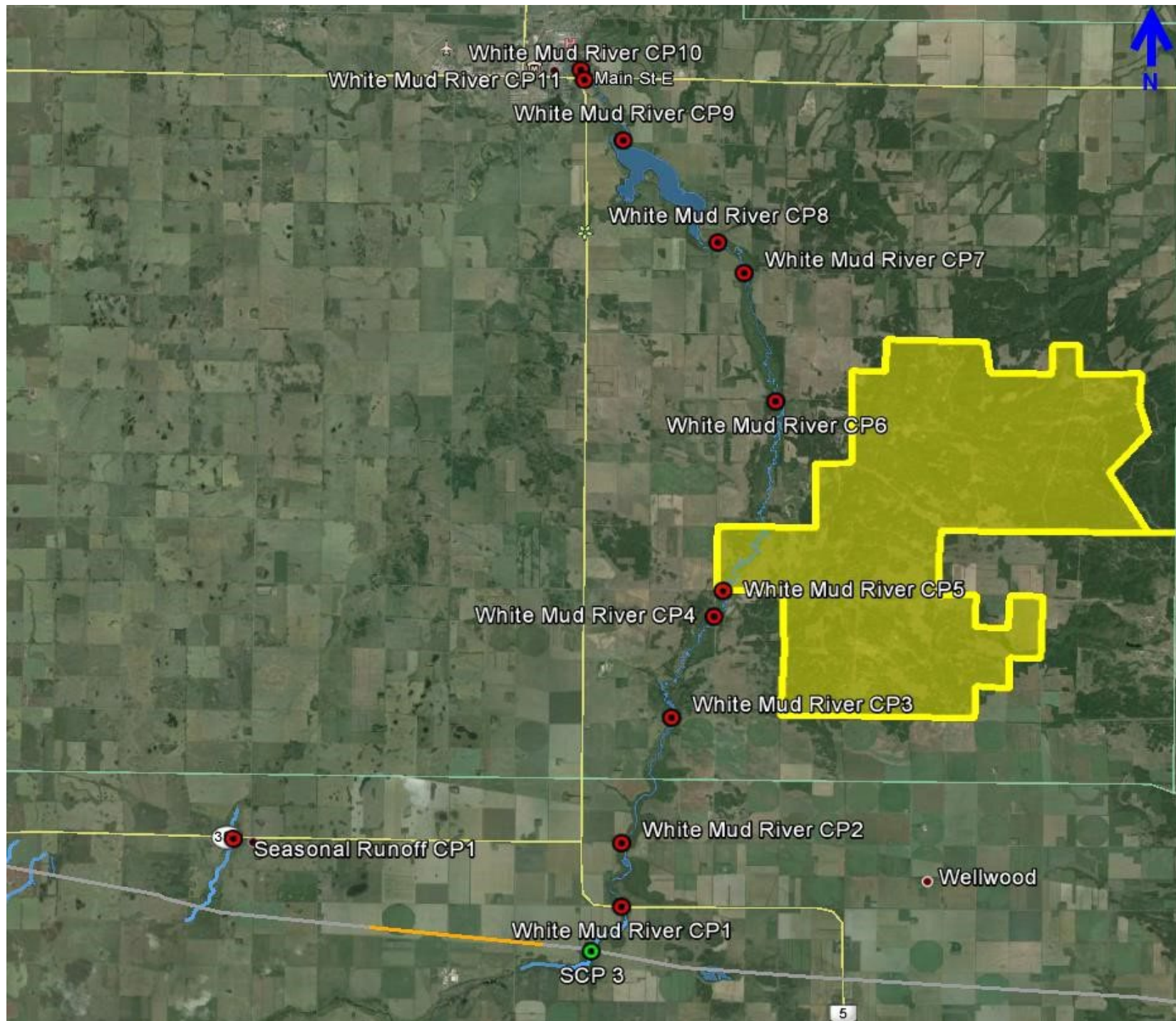
Map 1:
Overview Map
of entire GRP
Area within the
Assiniboine
Delta Aquifer



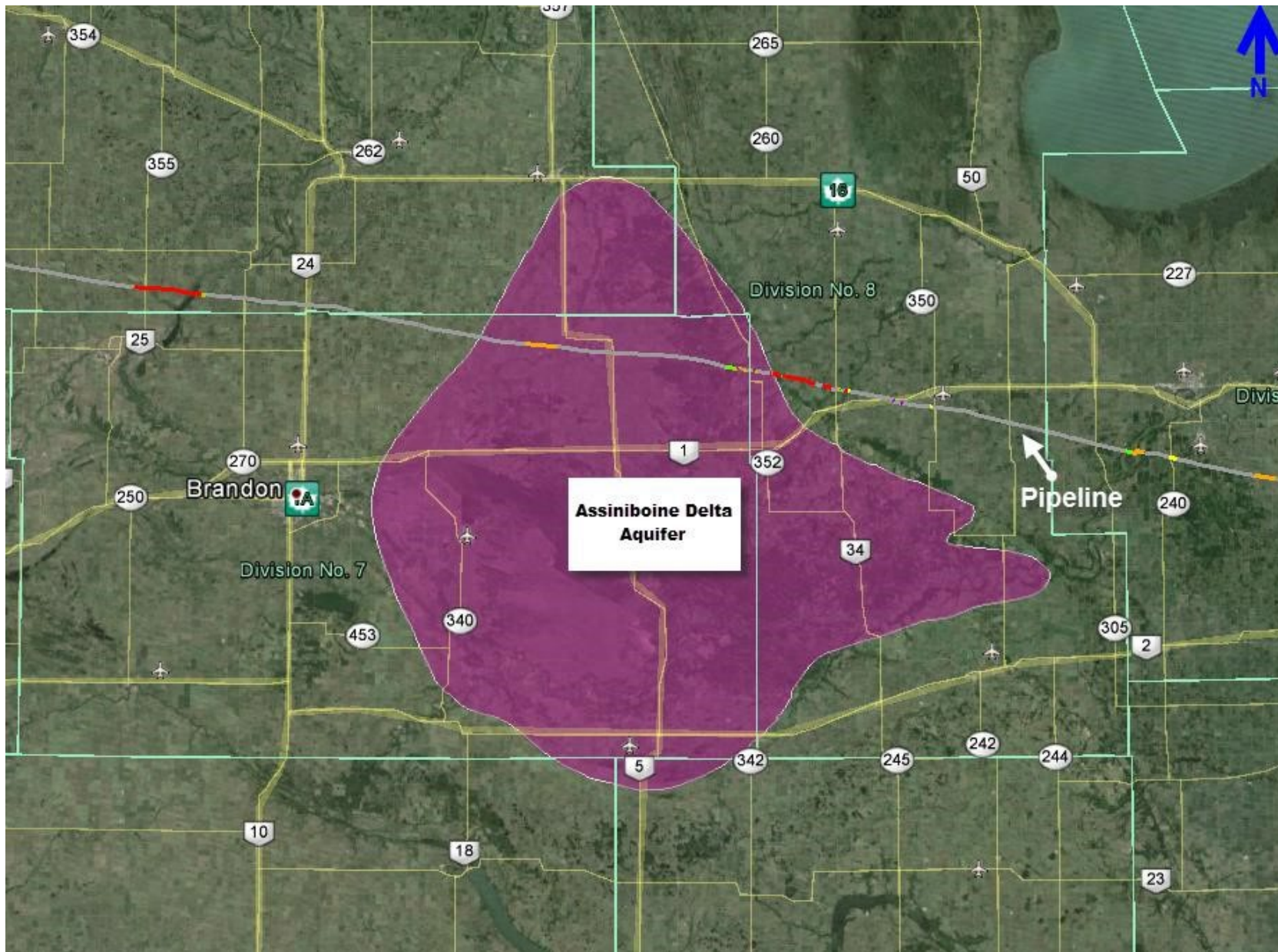
2: identifies
protected
areas
within the
GRP



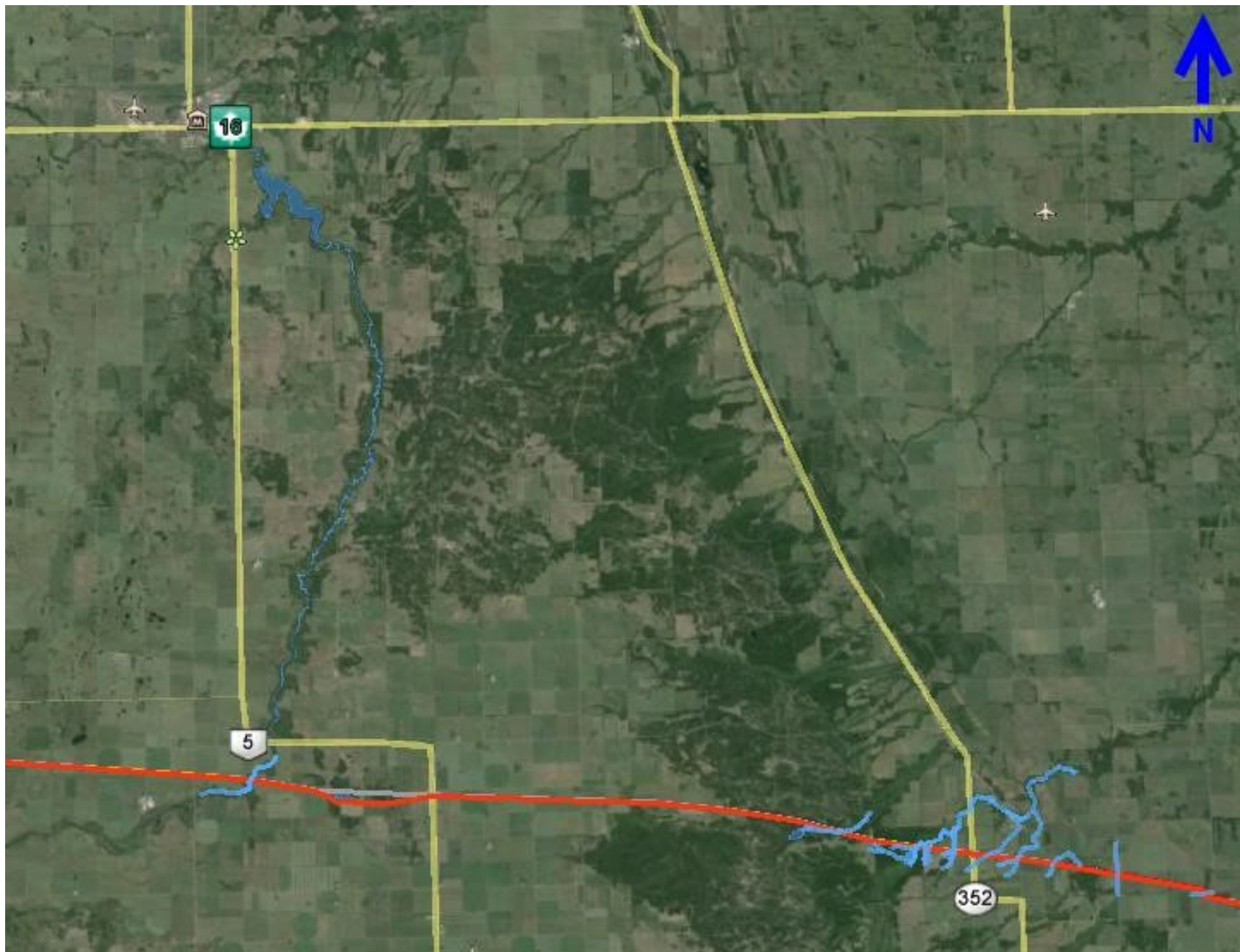
Map 3:
close up
of Pine
Creek
source
and
tactical
control
points



Map 4: close up of the White Mud River source and tactical control points



Map 5:
displays the
aquifer
within the
GRP



Map 6:

displaying the water channels within the
GRP

MEDICAL PLAN (ICS FORM 206)

Transportation

Name	Location	Contact #	Paramedics On-Site (Y/N)
Austin Fire Dept	10 2 Ave, Austin, MB R0H 0C0	911 / (204) 637-2450	N
Carberry Plains Health Centre	Carberry Health Centre Box 2000, Carberry MB R0K 0H0	(204) 834-2144	Y
Neepawa Health Centre	204-476-2394	(204) 476-2394	Y
Neepawa Fire Department	417 1 Ave, Neepawa, MB	911	N

Hospitals

Hospital Name	Address	Contact #	Travel Time		Burn Center	Heli-Pad
			Air	Ground		
Carberry Health Clinic	210 1st Ave, Carberry, MB R0K 0H0	(204) 834-2126				
<u>Brandon Regional Health Authority</u>	150 McTavish Ave E Brandon, MB	(204) 578-4000				
Manitoba Poison Centre		1-855-776-4766				
Neepawa Health Centre	204-476-2394, Neepawa MB R0J 1H0	(204) 476-2394				

Special Medical Emergency Procedures

RESOURCE REQUIREMENT MATRIX

	Calculation	Substantive Spills Avg. Probable <i>Redacted 2d</i>	Large Spills Max. Most Probable (10% WCD) <i>Redacted 2d</i>	Worst Case Discharge <i>Redacted 2d</i>
Skimmer (TDS 118)	=Volume of oil released/2,400 bbls x 2 to compensate for less 100% efficiency 1 skimmer = 2,400 bbls/day	1	4	40
Powerplant (Generator)	=1 per skimmer	1	4	40
Pump	=1 per skimmer	1	4	40
Boom (ft)	=1000 feet per recovery site	1000	4000	40,000
Vac Truck	=Volume of oil released/Vac Truck capacity/4 trips per day Vac Truck Capacity= 70bbls	2	18	171
Storage (Frac Tank)	=Volume of oil released/Frac Tank capacity x 2 Frac Tanks = 500 bbls	2	20	192

this GRP is located in Response Zone 2 of the Keystone ERP. The WCD was determined by the Pipeline and Hazardous Materials Safety Administration Discharge Volume Association. Within the specific area of this GRP the WCD is *Redacted 2d

POTENTIAL INCIDENT COMMAND POST FACILITIES

Name/Address	Phone Number	Distance From – Center (KM)	Conference Room Size	Food Service On Site (Y/N)	Internet Access (Y/N)	Notes
Royal Canadian Legion 560 13th St E, Brandon, MB R7A 7C1	(204) 728-5026		300 people	Y	Y	Hall rental & catering available. Accommodate up to 300. Email: Redacted 1b
West End Community Centre Hall 247 23rd St, Brandon, MB R7B 1V5,	(204) 727-3024		127 people	N	Y	A/C hall, 127 capacity, website: www.westendccbbrandon.ihyd.com
Westridge Community Centre 32 Willowdale Cres, Brandon, MB R7B 3W8	(204) 728-0973			N	Y	Email Redacted 1b Westridgecommunitycentre@gmail.com Evenings after 6pm and weekend rentals only Half day: \$100 Full day: \$175 Weekend: \$225
Central Community Centre 529 - 4th Street, R7A 3H5	(204) 728-4910		110 people	N	Y	Events are open to the public. Redacted 1b for more information.
Riverview Curling Club 420 Maryland Avenue Brandon, Manitoba R7A 6Z8	(204) 728-6004		250 people	Y	Y	Redacted 1b
Royal Canadian Legion 560 13th St E, Brandon, MB R7A 7C1	(204) 728-5026		300 people	Y	Y	Hall rental & catering available. Accommodate up to 300. Email: Redacted 1b

POTENTIAL STAGING AREAS

Name/Address Lat/Long	Landowner	Phone number	Size / Area	Description (Paved Gravel, Field, etc.)
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**** TO BE DETERMINED BY TACTICAL CONTROL POINT FORMS**

LOCAL LODGING

Name/Address Lat/Long	Phone Number	Distance From – Center (Miles/Kilometers)	Units (Total)	Food Service On-Site (Y/N)	Internet Access (Y/N)	Notes
Robins Nest Motel & Café Junction Hwy 1 & Hwy 5 Carberry, MB R0K 0H0	(204) 834-2878		12	Y	Y	family-owned, Won Business of the Year 2012, homemade meals, air conditioned rooms that are equipped with new flat screen TVs and wireless internet access. All rooms are non-smoking, and are clean and fresh.
Motel 6 Brandon 815 Middleton Ave. Hwy 1 and 10, Brandon, Manitoba R7C 1A8 , Canada	(204) 726-4000		89	N	Y	Restaurants near-by, Business center w/ internet access, free Wi-Fi, kitchenette, suites, gym, free parking, pet friendly, wheelchair access. Laundry, conference rooms.
Lakeview Inn and Suites Brandon 1880 18th Street, Brandon, Manitoba R7C1A5, Canada	(204) 728-1880		66	N	Y	Business Centre w/ internet access, free breakfast, free parking, wheelchair access, gym, free Wi-Fi, swimming pool
Comfort INN 925 Middleton Ave., Brandon, Manitoba R7C 1A8, Canada	(855) 973-7216		79	N	Y	Free Breakfast, free parking, wheelchair access, free Wi-Fi, pet friendly,

BEST WESTERN PLUS Brandon Inn 205 Middleton Avenue Brandon, Manitoba, R7C 1A8, CA	(204) 727-7997			N	Y	<ul style="list-style-type: none"> • High Speed Internet • Complimentary Breakfast <ul style="list-style-type: none"> • Pool • Fitness Center <ul style="list-style-type: none"> • Hot Tub • Eco-Friendly
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LOCAL CATERING SERVICES

Name/Address Lat/Long	Phone Number	Distance From – Center (Miles/Kilometers)	Delivery (Y/N)	Notes
Komfort Kitchen 835 Princess Avenue R7A 0P5 Brandon, MB	(204) 727-6867		Y	
Pita Central 601A 18th St. Brandon, MB, R7A 5B3	(204) 725-0088		N	
Robins Nest Café Junction Hwy 1 & Hwy 5, Carberry, MB, R0K 0H0	(204) 834-2878		N	
Subway Sandwiches & Salads 16500 Manitoba's Hwy of Heroes, Austin, MB R0H 0C0			Y	
Lee's Village Restaurant 248 Hamilton St, Neepawa, MB R0J 1H0	(204) 476-5163		Y	
Chicken Corral Restaurant 51 Main St W, Neepawa, MB	(204) 476-5653		N	
Chicken Delight 497 PTH & Hwy 5 North, Neepawa, MB R0J 1H0	(204) 476-7500		N	

Subway Sandwiches & Salads 11 Main St E, Neepawa, MB R0J 1H0	(204) 476-3664		N	
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LOCAL RESPONSE CONTRACTORS

Name/Address Lat/Long	Phone Number	Distance From- Center (Miles/Kilometers)	Notes
Quantum Murray Emergency Response	(877) 378-7745		
Manitoba Producers Oil Spill Co-op	(204)748-4260		Redacted 1b
Tervita Corporation	1-800-32-SPILL (77455)		24hr North American Emergency Response Line
Euroway Industrial Services	(204) 661-0500		
Stantec Consulting			Environmental Sampling and consulting For Manitoba/Sask area contact Redacted 1b For work in Alberta contact Redacted 1b
Tetra Tech Consulting			Environmental Sampling and consulting Please contact Redacted 1b
Focus Wildlife	1-310-386-5965		
NewAlta	1-800-774-8466		24hr Emergency Response Line

LOCAL CONTACTS

Name	Location	Phone Numbers
The City of Brandon Fire and Emergency Services	120 19 St N, Brandon, MB R7B 3X6	(204) 729-2400
Brandon Police department	21 8 St, Brandon, MB R7A 3W7	(204) 729-2352
Neepawa Fire Department	417 1 Ave, Neepawa, MB	911
Austin Fire Dept	10 2 Ave, Austin, MB R0H 0C0	911 / (204) 637-2450
Neepawa RCMP	239 Mill St, Neepawa, MB	911
Carberry RCMP	421 Main St, Carberry, MB R0K 0H0	911/ (204)834-2131
Carberry Fire Hall	515 4 Ave, Carberry, MB R0K 0H0	911
Town of Carberry/RM of North Cypress-Langford	Town of Carberry/RM of North Cypress	(204) 834-6600
RM of North Norfolk	27 Hampton Street P.O. Box 190 MacGregor Manitoba R0H 0R0	(204) 685-2211
Town of Neepawa	275 Hamilton St, Neepawa, MB R0J 1H0	(204) 476-7600

CONTROL POINTS ASSOCIATED WITH THIS PLAN

This Geographic Response Plan includes several Control Points which may be referenced for recommendation or considerations when containing or recovering released oil in the Carberry, MB area. When this plan is viewed in electronic format with access to the TransCanada intranet, the links below can be clicked to access each Control Point. When this plan is printed and viewed in paper format, the Control Points should also be printed and attached to the Plan.

PINE CREEK

[PINE CREEK SCP 1](#)
[PINE CREEK TCP 1](#)
[PINE CREEK TCP 2](#)
[PINE CREEK TCP 3](#)
[PINE CREEK TCP 4](#)
[PINE CREEK TCP 5](#)

WHITEMUD RIVER

- [WHITEMUD RIVER SCP 1](#) □ [WHITEMUD RIVER SCP 2](#) □ [WHITEMUD RIVER TCP 1](#)
- [WHITEMUD RIVER TCP 2](#) □ [WHITEMUD RIVER TCP 3](#) □ [WHITEMUD RIVER TCP 4](#)
- [WHITEMUD RIVER TCP 5](#) □ [WHITEMUD RIVER TCP 6](#) □ [WHITEMUD RIVER TCP 7](#)
- [WHITEMUD RIVER TCP 8](#) □ [WHITEMUD RIVER TCP 9](#) □ [WHITEMUD RIVER TCP 10](#)
- [WHITEMUD RIVER TCP 11](#)