

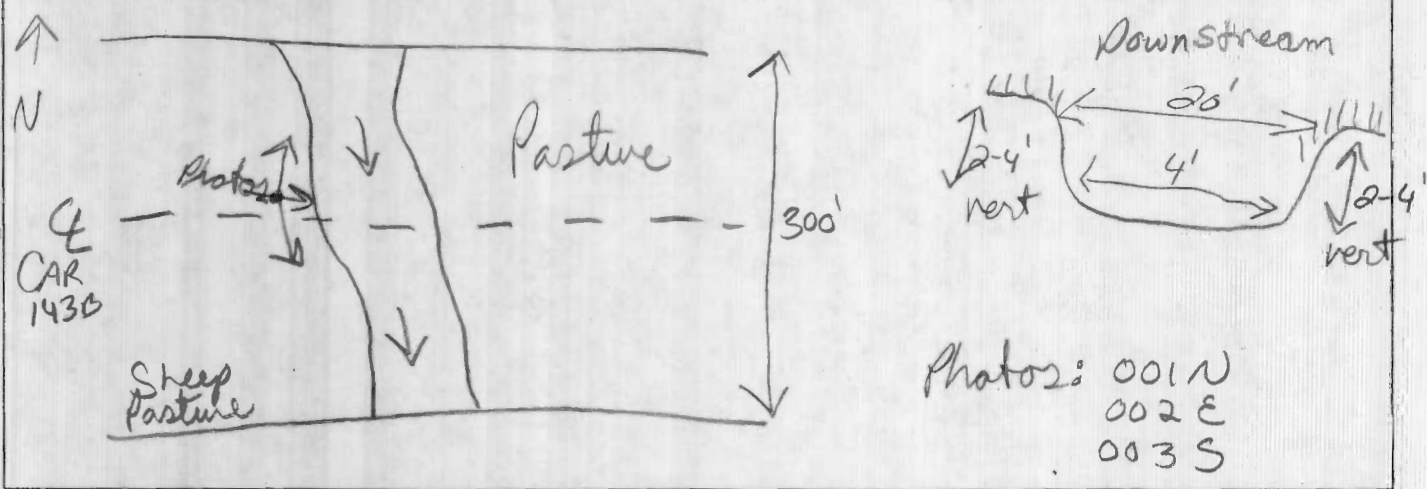
Waterbody Data Form

S500HA012

Centerline Re-Route Access Road Ancillary Facility Transmission Line Other

Centerline ID: 3/26/10		Project Designated Name: Keystone XL Phase IV	
Date: 11/5/10	Client/Project Name: TransCanada-Trow-KXL	Milepost Enter/Exit: CAR 143B	
Team: B500	State/County: SD-Harding	Quad Name: NA	
Logbook No.: 1	Logbook Page No.: 20	Tract No.: PS-15-SD-HA-00105	

Drawing (Please provide orientation arrow, all features identified, location to centerline, etc.)



Waterbody Type:	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> Borrow Pit <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ag. Ditch <input type="checkbox"/> Other
Stream Flow:	<input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow <input checked="" type="checkbox"/> Very Slow <input type="checkbox"/> None
Flow Type:	<input type="checkbox"/> Perennial (Flows year round) <input checked="" type="checkbox"/> Intermittent (Flows <3 month) <input type="checkbox"/> None <input type="checkbox"/> Seasonal (Continuous flow ≥ 3 months) <input type="checkbox"/> Ephemeral (Flows only in response to rainfall)
Direction of Flow:	<input type="checkbox"/> N <input type="checkbox"/> NE <input type="checkbox"/> E <input type="checkbox"/> SE <input checked="" type="checkbox"/> S <input type="checkbox"/> SW <input type="checkbox"/> W <input type="checkbox"/> NW <input type="checkbox"/> No Flow
OHWM Width (ft.):	4'
Sinuosity:	<input type="checkbox"/> Braided <input type="checkbox"/> Meandering <input checked="" type="checkbox"/> Straight <input type="checkbox"/> N/A
Stream Width (ft.):	Top 20' Water Surface (At Crossing Location)
Stream Depth (ft.):	<input checked="" type="checkbox"/> 0-0.5' <input type="checkbox"/> 1-3 <input type="checkbox"/> 3-6 <input type="checkbox"/> 6-12 <input type="checkbox"/> 12-18 <input type="checkbox"/> 18-24 <input type="checkbox"/> 24-36 <input type="checkbox"/> 36-48 <input type="checkbox"/> 48-60 <input type="checkbox"/> 60+
OHWM Indicators:	Bent reed, scow
Bank Height (ft.): (Looking Downstream)	Left: <input type="checkbox"/> 0-2 <input checked="" type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+ Right: <input type="checkbox"/> 0-2 <input checked="" type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+
Bank Slope: (Looking Downstream)	Left: <input type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input checked="" type="checkbox"/> Vertical Right: <input type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input checked="" type="checkbox"/> Vertical

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Qualitative Attributes

Water Appearance: Clear Turbid Sheen on Surface Floating Algal Mats
 Slightly Turbid Very Turbid Greenish Color Obvious Surface Scum
 No Flow Other:

Stream Substrate %: *Sandy clay loam*

Aquatic Habitats: Sand Bar Gravel Riffle In-stream Emergent Plant % Cover: *10%*
 Gravel Bar Deep Pools In-stream Submerged Plant % Cover:
 Mud Bar Bank Root Systems Fringing Wetlands Characteristics:
 Undercut Banks Overhanging Trees/Shrubs None

Aquatic Organisms Observed: *None*

Riparian Zone:
Width of Natural Vegetation Zone from Edge of Active Channel out to Flood Plain (ft): Left - *5'* Right - *5'*
Vegetative Layers: Herbs Shrubs Trees Multiple
Significant Bare Areas Within Riparian Zone Yes No Unknown
Evidence Of Non-Buffered Concentrated Flows: Yes No Unknown

Tributary Condition: Natural Artificial (Man-Made) Manipulated

Channel Condition: Channelization/Braiding Unnatural Straightening Downcutting
 Dikes/Berms Excessive Bank Erosion N/A

Disturbances: Livestock Access to Riparian Zone Manure In Stream or On Banks
 Waste Discharge Pipes Present
 Other:

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:
Habitat ID Number: *NA*

Comments: *Sheep Pasture*

Stream Quality: High Moderate Low