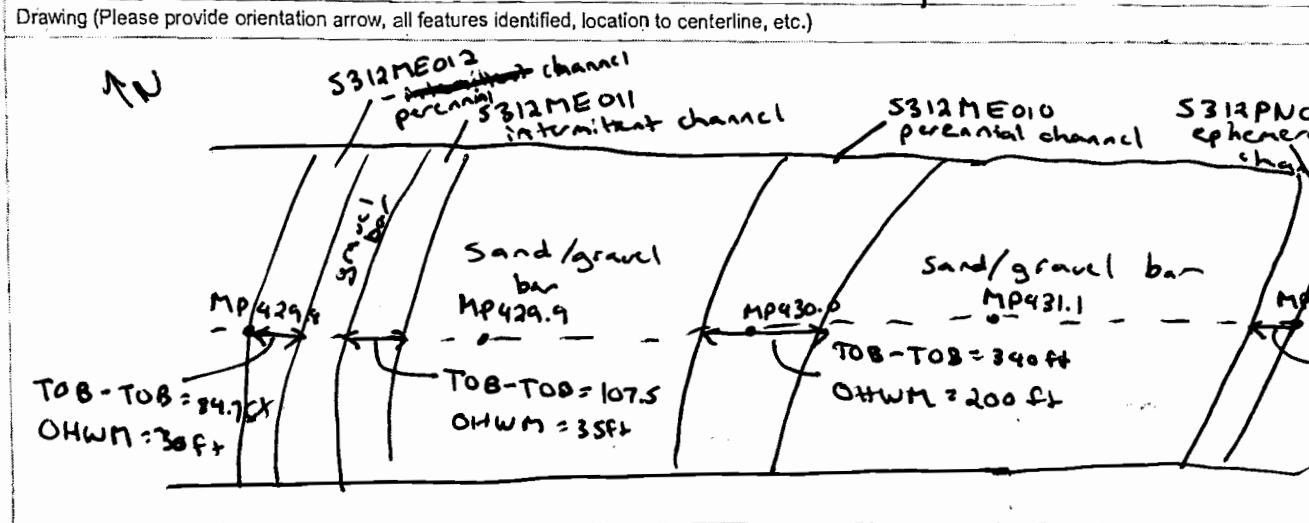


Waterbody Data Form

Centerline
 Re-Route
 Access Road
 Ancillary Facility
 Transmission Line
 Other

Centerline ID: S312PN002		Project Designated Name: Cheyenne River	
Date: 10-6-12 & 10-9-12		Client/Project Name: Keystone xc	
Team: 312		Milepost Enter/Exit: 430.0	
Logbook No.: 1		State/Country: SD / ME & PN	
Logbook Page No.:		Tract No.: ML-SD-ME-01250.000; ML-SD-ME-01255.000	



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 checked="" type="checkbox"/> Moderate	<input type="checkbox"/> Slow	<input type="checkbox"/> Very Slow	<input type="checkbox"/> None					
Flow Type:		<input checked="" type="checkbox"/> Perennial (Flows year round)		<input 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 checked="" type="checkbox"/> NE	<input type="checkbox"/> E	<input type="checkbox"/> SE	<input type="checkbox"/> S	<input type="checkbox"/> SW	<input type="checkbox"/> W	<input type="checkbox"/> NW	<input type="checkbox"/> No Flow	
OHWM Width (ft.):		<i>See above</i>									
Sinuosity:		<input checked="" type="checkbox"/> Braided		<input type="checkbox"/> Meandering		<input type="checkbox"/> Straight		<input type="checkbox"/> N/A			
Stream Width (ft.):		<i>See above</i>				Water Surface (At Crossing Location) <i>See above</i>					
Stream Depth (ft.):		<input type="checkbox"/> 0	<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:		<i>See above</i>									
Bank Height (ft.): (Looking Downstream)		Left:		Right:							
		<input type="checkbox"/> 0-2	<input type="checkbox"/> 2-4	<input type="checkbox"/> 4-6	<input checked="" type="checkbox"/> 6-8	<input type="checkbox"/> 8+	<input type="checkbox"/> 0-2	<input type="checkbox"/> 2-4	<input type="checkbox"/> 4-6	<input checked="" type="checkbox"/> 6-8	<input type="checkbox"/> 8+
Bank Slope: (Looking Downstream)		Left:		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	<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

Qualitative Attributes

Water Appearance:			
<input type="checkbox"/> Clear	<input type="checkbox"/> Turbid	<input type="checkbox"/> Sheen on Surface	<input type="checkbox"/> Floating Algal Mats
<input type="checkbox"/> Slightly Turbid	<input type="checkbox"/> Very Turbid	<input type="checkbox"/> Greenish Color	<input type="checkbox"/> Obvious Surface Scum
<input type="checkbox"/> No Flow	<input type="checkbox"/> Other:		
Stream Substrate %:			
Aquatic Habitats:			
<input type="checkbox"/> Sand Bar	<input type="checkbox"/> Gravel Riffle	<input type="checkbox"/> In-stream Emergent Plant	% Cover:
<input type="checkbox"/> Gravel Bar	<input type="checkbox"/> Deep Pools	<input type="checkbox"/> In-stream Submerged Plant	% Cover:
<input type="checkbox"/> Mud Bar	<input type="checkbox"/> Bank Root Systems	<input type="checkbox"/> Fringing Wetlands	Characteristics:
<input type="checkbox"/> Undercut Banks	<input type="checkbox"/> Overhanging Trees/Shrubs	<input type="checkbox"/> None	
Aquatic Organisms Observed:			
Riparian Zone:			
Width of Natural Vegetation Zone from Edge of Active Channel out to Flood Plain (ft): Left - 50+ Right - 50+			
Vegetative Layers: <input type="checkbox"/> Herbs <input type="checkbox"/> Shrubs <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Multiple			
Significant Bare Areas Within Riparian Zone <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown			
Evidence Of Non-Buffered Concentrated Flows: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown			
Tributary Condition:			
<input type="checkbox"/> Natural <input type="checkbox"/> Artificial (Man-Made) <input type="checkbox"/> Manipulated			
Channel Condition:			
<input checked="" type="checkbox"/> Channelization/Braiding <input type="checkbox"/> Unnatural Straightening <input type="checkbox"/> Downcutting			
<input type="checkbox"/> Dikes/Berms <input type="checkbox"/> Excessive Bank Erosion <input type="checkbox"/> N/A			
Disturbances:			
<input checked="" type="checkbox"/> Livestock Access to Riparian Zone <input checked="" type="checkbox"/> Manure In Stream or On Banks			
<input type="checkbox"/> Waste Discharge Pipes Present			
<input type="checkbox"/> Other:			
Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:			
Habitat ID Number: - rangeland			
Comments:			
- large river complex - water still present despite drought			
Stream Quality:			
<input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			