

NEPA COMPLIANCE SURVEY

SEE OTHER NCS # 262, #266, & #269

Project Information			
Project Title:	Geothermal Technologies Program	Date:	July 1, 2010
DOE Code:	6730.020.61041	Contractor Code:	8067-731
Project Lead:	Lyle Johnson	FOR THE MOST PART	
<p style="text-align: center;">Project Overview</p> <ol style="list-style-type: none"> 1. Brief project description [include anything that could impact the environment] 2. Legal location 3. Duration of the project 4. Major equipment to be used 		<p>Install power line from existing pole on the section 21 drilling pad to the location for the pump to withdraw water from the Little Teapot Creek for the geothermal project at the NWF building. The line will be trenched in and will follow an existing road. The potential exists for disturbance of cultural artifacts during the excavation of virgin ground, FROM THE POWER POLE APPROXIMATELY 10 YARDS TOWARDS THE CREEK.</p> <p>Center of Section 21 T 39 N, R 78 W, see accompanying map for more detail</p> <p>The project is presently scheduled for 3 years</p> <p>Trencher</p>	

The table below is to be completed by the Project Lead and reviewed by the Environmental Specialist and the DOE NEPA Compliance Officer. **NOTE: If Change of Scope occurs, Project Lead must submit a new NEPA Compliance Survey and contact the Technical Assurance Department.**

	Impacts Anticipated?			If YES, then complete below
	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Water Quality				
Does the proposed project present potential for impacts on water resources or water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the project affect surface water quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the proposed project affect groundwater quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area include "Waters of the State?"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area require a Corps of Engineers permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

GEO THERMAL ENERGY ENHANCEMENT FACILITIES ARE APPROVED BY THE OCTOBER 2008 FONSI FOR THE SITEWIDE EA.

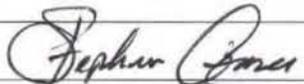
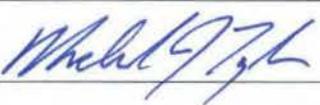
NEPA COMPLIANCE SURVEY

	Impacts Anticipated?			If YES, then complete below.
	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Geology & Soils				
Does the proposed project present potential for impacts related to geology or soils?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The soil will be trenched for placement of the lines and then refilled and compacted so no problems should exist
Does the proposed project alter, excavate or otherwise disturb land area consistent with other land use and habitat area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See above
Is the proposed project likely to impact local seismicity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If the project involved disturbance of surface soils, are erosion and storm water control measures addressed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Air Quality	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Does the proposed action present potential for impacts on ambient air quality under both normal and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are potential emissions (gases and/or airborne particulates including dust) outside of the normal scope for oil field operations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the project present risk to human health and the environment from exposure to radiation and hazardous chemicals in emissions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the project subject to New Source Performance Standards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the project subject to National Emissions Standards for Hazardous Air Pollutants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the project subject to emissions limitations in an Air Quality Control Region?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

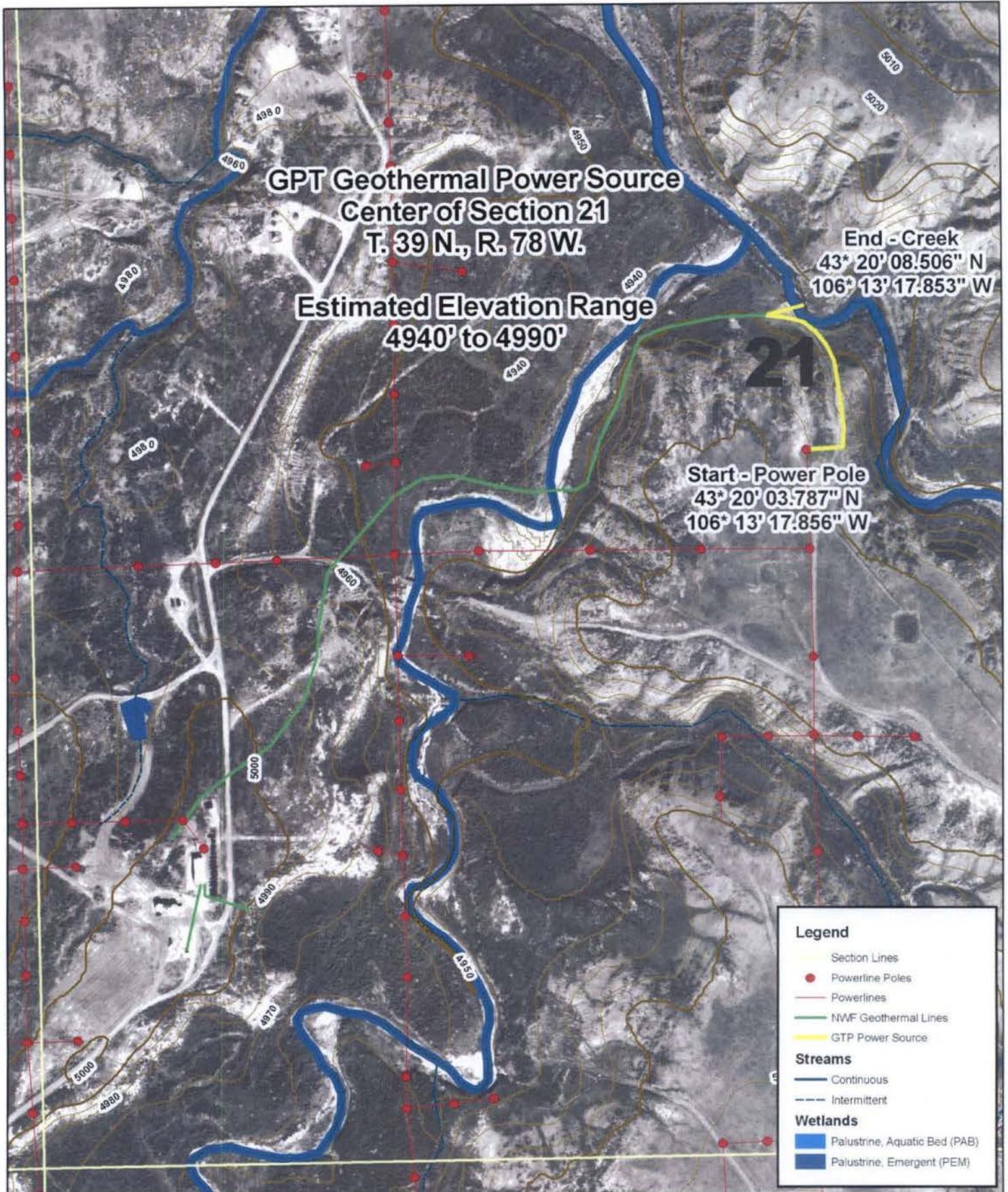
NEPA COMPLIANCE SURVEY

	Impacts Anticipated?			If YES, then complete below.
Wildlife and Habitat	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Does the proposed action present potential for impacts on wildlife or habitat?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the project impact state or federally listed threatened and endangered species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Human Health Effects	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Does the proposed project present potential for effects on human health? e.g.: Hanta virus, radiological exposure, or chemical exposure (must provide MSDS)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Transportation	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Does the proposed project involve transportation of radiological sources or hazardous materials (including explosives)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Waste Management and Waste Minimization	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Are pollution prevention and waste minimization practices needed in the proposed project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does project plan establish procedures in compliance with local, state and/or federal laws and guidelines affecting the generation, transportation, treatment, storage or disposal of hazardous and other wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

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			Impacts Anticipated?			If YES, then complete below.	
Cultural Impact			Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:	
Is there potential for impact on cultural (historic) resources?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Archeological survey will be conducted anyway.	
Community Impact			Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:	
Will the proposed project introduce significantly adverse auditory, visual, or other impact?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Will the proposed project adversely affect the community's use of public land/resources?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Will the proposed project adversely affect the community's access to private land?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
NOTE: Topography Map and Wetlands Map are required to be attached. Attach applicable SOPs for Risk Assessment Level 2 & 3 and specific test procedures.							
Are environmental permits required? If YES, list below:						Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Section below to be reviewed by Environmental Specialist and DOE NCO.							
Adequate Mitigation Measures Provided?			Adequate Mitigation Measures Provided?				
	Yes	No		Yes	No		
Water Quality Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Transportation Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Air Quality Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Waste Management Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Wildlife and Habitat Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cultural Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Geology and Soils Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Community Impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Human Health Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Categorical Exclusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Approvals							
Comments and Conditions:	B4.12 Construction of electric powerlines approximately 10 miles in length or less,						
Contractor ESS&H						Date 7/9/10	
Comments and Conditions:	Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1A), I have determined that the proposed action fits within the specified class of actions, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.						
DOE NEPA Compliance Officer						Date 7/9/10	

GPT Geothermal Power Source



GTP Geothermal Power Source

Author: J Buelt	Project Manager: L Johnson		
GIS-Prj-6730 020.61041-1	Date: 06/30/2010	Rev Date:	
WY State Plane / East Central Zone / NAD27		Scale = 1:5,000	

RMOTC
907 N Poplar, Suite 150
Casper, WY 82601
307-233-4800

0 250 500 1,000 Feet

Data represented on this map is for planning purposes only. RMOTC makes no warranties as to its accuracy, reliability or completeness. Any use of this data is strictly the responsibility of the user. This is an uncontrolled RMOTC drawing.

[COVERED BY SWEA OCT 2008]

NEPA COMPLIANCE SURVEY

#266

Project Information			
Project Title:	Geothermal Technologies Program	Date:	12/8/09
DOE Code:	6730.020.61041	Contractor Code:	8067-731
Project Lead:	Lyle Johnson		
Project Overview 1. What are the environmental impacts? 2. What is the legal location? 3. What is the duration of the project? 4. What major equipment will be used if any (work over rig, drilling rig, etc.)?		This work will consist of the laying of two pipelines to complete the construction of a low temperature geothermal testing facility at the NWF building in Section 21. The first line will be a 250 feet long, 6 inch steel line from well 17 WX 21 to the building. This line will provide hot Madison water to the facility. The second line will be a 250 feet long 10 inch steel line to return the cooling water and excess Madison to the Teapot Creek drainage. This line will terminate on a cement slab, a stone pile or a combination of both to prevent erosion. There are minimal environmental impacts expected. The 6 inch line is in a prior disturbed area. The 10 inch line is approximately 50% in a prior disturbed area, the remaining will be in an area where removal of some vegetation will be required. This is a 3 year testing program	

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	Impacts Anticipated?			If YES, then complete below
	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Water Quality				
Does the proposed project present potential for impacts on water resources or water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the project affect surface water quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the proposed project affect groundwater quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area include "Waters of the State?"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area require a Corps of Engineers permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

NEPA COMPLIANCE SURVEY

262

Project Information			
Project Title:	Geothermal Technologies Program	Date:	12-11-09
DOE Code:	6730.020.61041	Contractor Code:	
Project Lead:			
Project Overview			
<ol style="list-style-type: none"> 1. What are the environmental impacts? 2. What is the legal location? 3. What is the duration of the project? 4. What major equipment will be used if any (work over rig, drilling rig, etc.)? 	<p>This NEPA is for the laying of a 2,975 foot, 8" welded plastic water line from Little Teapot Creek near in the intersection with Teapot Creek to the North Waterflood Facility (NWF) building. The entire project area is within Section 21 T39N R78W (map attached) and will not impact any wet land areas but will cross one intermittent stream. The stream is presently dry. The project will include the clearing of vegetation from a 12 foot wide construction corridor along the route, digging a 5 foot deep trench, welding and placing the plastic line and covering and compacting the trench. This task should take approximately one month and the line will remain in place for an undetermined period to supply cooling water to the NWF for geothermal testing. Equipment required for this project will be a blade to clear the right-of-way, a backhoe to dig and fill the trench, a plastic welding machine (to be rented) and possible a boom truck to lay the line.</p>		

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	Impacts Anticipated?			If YES, then complete below
	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Water Quality				
Does the proposed project present potential for impacts on water resources or water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An intermittent stream will be crossed but this time of the year the streambed is dry and will be returned to its original condition.
Does the project affect surface water quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the proposed project affect groundwater quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area include "Waters of the State?"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area require a Corps of Engineers permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Before construction into the streams, ACOE must be notified

NEPA COMPLIANCE SURVEY

269

Project Information			
Project Title:	Geothermal Technologies Program	Date:	12-11-09
DOE Code:	6730.020.61041	Contractor Code:	
Project Lead:	Lyle Johnson		
Project Overview			
<ol style="list-style-type: none"> 1. What are the environmental impacts? 2. What is the legal location? 3. What is the duration of the project? 4. What major equipment will be used if any (work over rig, drilling rig, etc.)? 	<p>This NEPA is for the laying of a 350 foot, 8" welded plastic water line from the lower cooling pond at the Tensleep battery to a location between the 5,000 bbl tank and the top pond at the Tensleep battery. The entire project area is within Section 10 T39N R78W (map attached) and will not impact any wet land areas. The project will include the clearing of sparse vegetation from a 12 foot wide construction corridor along the route, digging a 5 foot deep trench, welding and placing the plastic line and covering and compacting the trench. This work is in an area that has been disturbed multiple times and has multiple buried lines. This task should take approximately one week and the line will remain in place for an undetermined period to supply cooling water for geothermal testing in the Tensleep battery area. Equipment required for this project will be a blade to clear the right-of-way, a backhoe to dig and fill the trench, a plastic welding machine (to be rented) and possible a boom truck to lay the line.</p>		

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	Impacts Anticipated?			If YES, then complete below
	Yes	No	NA	If the anticipated impact might be unacceptable, recommend mitigation measures:
Water Quality				
Does the proposed project present potential for impacts on water resources or water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The water drawn from the cooling pit will be used only for cooling purposes and will have no contact with the Geothermal mechanism. It will be reintroduced to the Tensleep pits for recycling and no impact to water quality
Does the project affect surface water quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the proposed project affect groundwater quantity or quality under both normal operations and accident conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area include "Waters of the State?"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the project area require a Corps of Engineers permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	