

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Point of Pines Inc. Septic and Right-of-Way Easement Project
Proposed Implementation Date:	August, 2010
Proponent:	Point of Pines, Incorporated (Point of Pines)
Location:	State Land in Section 32, Township 32 north, Range 22 west
County:	Flathead

I. TYPE AND PURPOSE OF ACTION

The proposed project would grant an easement to the Point of Pines Home Owner's Association for 3 purposes:

- 1/ Approximately 4.35 acres for a sewer service easement.
- 2/ Approximately 0.34 acres for private driveways and utility easement.
- 3/ Potentially some minor uneconomic remainders of State Land located between the subdivision and East Lakeshore Drive.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The concept of allowing a community septic system on State Land was introduced and incorporated into the Whitefish Neighborhood Plan (2004). The intent is to provide an alternative to existing inadequate septic systems located on steep slopes above Whitefish Lake. Since that time, residents from Brittell's Point of Pines Subdivision have submitted a proposal, completed surveys and engineering designs, and have collected data on soils and percolation. A map and a public scoping letter that described the proposal were sent to adjacent property owners and Department of Natural Resources and Conservation (DNRC) resource specialists on November 20, 2008. Comments on the proposal were requested; the comment period was open through December 20, 2008. The comments were received in the form of three e-mails and one letter.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION:

Montana Department of Fish, Wildlife and Parks (DFWP) has jurisdiction over the management of wildlife in the project area.

An approval of plans and a Septic System Permit would be required from Flathead City-County Health Department.

An Encroachment Permit would be required from Flathead County Road Department.

An approval of plans, Ground Water Pollution Control System (MGWPCS) Discharge Permit and a General Permit for Storm Water Discharges Associated with Construction Activity would be required from Montana Department of Environmental Quality (DEQ).

3. ALTERNATIVES CONSIDERED:

No-Action Alternative

An easement for a wastewater treatment system, private driveway/utility and uneconomic remainders would not be granted and revenue would not be generated for the appropriate school trusts in the proposed project area at this time. Ongoing timber management, general recreational use, fire suppression, noxious-weed control, additional requests for permits and other ongoing management requests may occur.

This alternative can be used as a baseline for comparing the effects that Action Alternative B would have on the environment. The No-Action Alternative is considered a possible alternative for selection.

Action Alternative

Brittell's Point of Pines Subdivision Homeowner's Association proposes obtaining easements on State Land for approximately 4.35 acres for a wastewater treatment system, approximately 0.34 acres for private driveways/utility, and potentially some minor uneconomic remnants/remainers on State Land located between the subdivision and East Lakeshore Drive. The majority of the State property that may be occupied by the wastewater treatment system would accommodate a drainfield and a replacement drainfield area. The wastewater treatment system would be designed to receive filtered septic tank effluent from a total of 25 dwelling units equivalent to 3-bedroom single-family homes.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The land types for this area are 28-7 and 27-8. The soils have a medium-textured surface layer of loess 2 to 10 inches thick. The surface layer has been influenced by volcanic ash. Subsoils and substrata contain 35- to 80-percent rounded rock. Available water capacity is low to very low.

The No-Action Alternative would have no direct impacts on soils in the project area. No ground disturbance would occur and vegetation would continue to grow and provide cover, based on natural and preexisting conditions.

The Action Alternative would have direct impacts on approximately 1.2 to 1.5 acres of ground, which includes the proposed wastewater treatment system and associated sewage lines. Direct impacts would include soil compaction and displacement resulting from the use of ground-based equipment to remove, stockpile and replace soil during septic system and sewage line installation. Disturbed area will be re-vegetated shortly after disturbance.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The proposed project area has no existing surface water features. Brush Creek is located approximately 930 feet from the proposed project area. Brush Creek was found to have a stable channel with no active channel erosion identified. Timber management and gravel pit development have occurred in the Brush Creek watershed above the proposed project area. None of this activity has had any identified impacts to channel function or erosion and deposition.

Sampling of groundwater, performed by DEQ and the engineering firm designing the drain field, show that the groundwater in and around the proposed project area is Class 1. According to the MGWPCS, this means that the quality of these waters must be maintained so that they are suitable for the following beneficial uses with little or no treatment: Public and private water supplies; culinary and food processing purposes; irrigation; drinking water for livestock and wildlife; and commercial and industrial purposes. This also means that the groundwater in the area is considered to be high quality and cannot be impacted or degraded outside of an allowed mixing zone.

Direct and indirect effects of the No Action alternative would be similar to the conditions described under the existing conditions for water quality and water yield.

The Action Alternative would install a septic drain field and an associated recirculation tank and filter pods. These activities would involve the removal of approximately 1 acre of mature timber and would excavate this area in order to install the drain field. The soil disturbance and exposed soil have a very low risk of affecting surface water quality because of the distance to Brush Creek and the well-vegetated condition of the 930 foot buffer from the nearest surface water.

The proposed project would have a low risk of affecting nitrogen in surface water due to the installation of the filter pods. The Advantex AX-100 filter pods filter-out up to 98% of the nitrogen from septic effluent. As a result, the DEQ MGWPCS estimates that the concentration of total nitrogen would be 0.16 mg/L when it leaves the mixing zone in the groundwater. The Montana water quality standard for total nitrogen is 10.0 mg/L, and the more strict nondegradation significance criterion is 7.5 mg/L. As a result, there is a very low risk of nitrogen reaching surface water in Brush Creek as a result of the proposed project.

The proposed project would have a low risk of affecting phosphorus levels in surface water provided all requirements of the MGWPCS are followed. There is a slightly higher risk of phosphorus delivery to surface water due to the speed of groundwater movement through the soil, and because the soil types in and around the project area indicate low ability to hold or adsorb phosphorus. Based on the adsorption rates and the nondegradation policy for phosphorus, the DEQ MGWPCS set the allowable limit for phosphorus at 99 lb/year. Provided this standard is met, there is a low risk of phosphorus reaching surface water within the 50 year non-degradation criteria.

According to the MGWPCS, the Action Alternative is determined to be non-significant degradation to high quality waters. The determination was reached based on the load limits of all proposed pollutants being limited to levels below the non-degradation criteria. Monitoring of effluent is required every 3 months by the DEQ in order to calculate actual loads of nitrogen and phosphorus being discharged to the groundwater. Because of these load limits, the groundwater quality is expected to meet all requirements, and in turn, there is a low risk of adverse impacts to groundwater as a result of the proposed project.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

If the No-Action Alternative were selected, no effects would occur to air quality.

With the Action Alternative, dust pollutants in the air would likely increase only for a short term while heavy equipment is used to clear vegetation and install the treatment system, drainfield and 4" force main septic pipe along E. Lakeshore Road county right-of-way.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The project area is occupied with a mature timber stand where the overstory dominants are predominantly Douglas-fir and western larch. Other tree species include grand fir and Engelmann spruce. The stand is well-stocked and the structure is somewhat multistoried. Low shrubs dominate the understory. The habitat type is grand fir/queencup beadlily/wild sarsaparilla. This habitat type indicates a high to very high yield capability for the west side of Montana in terms of potential timber production.

The No-Action Alternative would not affect vegetation in the project area.

The Action Alternative would clear approximately 1.2 to 1.5 acres of this covertype and associated forest vegetation for installation of the wastewater treatment system.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Portions of the project area are within the home range of the Swift Creek bald eagle territory home range and approximately 4 acres of the project area was identified as elk, white-tailed and mule deer winter range.

If the No-Action Alternative were chosen, no appreciable changes in existing habitats would occur in the project area.

Under the Action Alternative, human disturbance in the project area is expected to continue at approximately the same levels. Thus, since no changes to human disturbance levels would occur and negligible changes in the availability of large emergent trees would be expected, minor direct and indirect effects would be expected to affect bald eagles using the territory.

Since some displacement would be expected as a result of motorized project activities and the treatment of 4 acres of winter range that would no longer function as thermal cover, moderate adverse effects to big game and habitat carrying capacity would be expected for the next 40 to 60 years.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of Special Concern. Identify cumulative effects to these species and their habitat.

The project area lies within 'occupied habitat' as mapped by grizzly bear researchers and managers to address increased sightings and encounters of grizzly bears in habitats outside of recovery zones, as-well-as the project area is within the annual home range of the Lazy Creek wolf pack. Old forest stands suitable for use by pileated woodpeckers also occur in the project area.

No disturbance to grizzly bears, wolves or pileated woodpeckers is expected to occur under the No-Action Alternative.

Negligible effects to grizzly bears and minor adverse effects to wolves and pileated woodpeckers are expected to occur with the implementation of the Action Alternative.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

No known historical features are associated with this land. Should historical archeological or cultural features be discovered during construction, work in that area will be suspended until the site can be properly evaluated.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The access road for this project is East Lakeshore Drive. This is a paved, county road that lies adjacent to the east Shore of Whitefish Lake. This road is used to access a number of single family residences as-well-as by recreationalists wanting to access the south end of Stillwater State Forest. The project area would be visible from anyone traveling on this road.

Aesthetics would not be affected if the No-Action Alternative were selected.

Under the Action Alternative, approximately 1.2 to 1.5 acres would be disturbed for construction of the wastewater treatment system. The disturbed area will be re-vegetated shortly after disturbance. With the exception of access covers, all of the treatment system components - recirculation tank, filter pods, siphon tanks, etc. - would be buried. The filter pods would be installed with the tops or covers 2 feet above the existing ground surface; however, fill would be placed around the filter pods so only the access covers would be exposed. Only the electrical and control panel enclosure, a single-phase electrical transformer and the access covers would be visible.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

None.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, State or Federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Whitefish Neighborhood Plan - 2004.

Beaver/Swift/Skyles Timber Sale Project EA, April 2009

IV. IMPACTS ON THE HUMAN POPULATION
<ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i>

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

None.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

None.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

No effects to employment would occur if the No-Action Alternative were selected.

Under the Action Alternative, Point of Pines Home Owner's Association would hire contractors to construct the wastewater collection/treatment system.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Tax revenue would not be affected if the No-Action Alternative were selected.

Due to the relatively small size of the proposal, no measurable cumulative impacts on tax revenues would be expected from the Action Alternative.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

None.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

There would be no effects if the No-Action Alternative were selected.

Under the Action Alternative, Point of Pines would be responsible for meeting all State and Flathead County regulations for septic/sanitation approval.

20. ACCESS TO, AND QUALITY OF, RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

East Lakeshore Road is the main road accessing the Lower Whitefish Road on the south end of Stillwater State Forest. The nearby dispersed recreational uses include hunting, fishing, berry picking, horseback riding, bicycling, camping, snowmobiling and disk golf.

No appreciable changes would occur to recreational activity in the project area under the No-Action Alternative.

No appreciable changes would occur to recreational activity in the project area under the Action Alternative.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

None.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

None.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

None.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

If easements are granted, the estimated return to the trust would be approximately \$94,000. The amount is based on approximately 4.7 acres, which included septic service, utility easement and private driveways, appraised at \$20,000/acre market value.

EA Checklist Prepared By:	Name: Nicole Stickney	Date: June 17, 2010
	Title: Special Uses Forester	

V. FINDING

25. ALTERNATIVE SELECTED: Upon review of the Checklist EA, and associated documents, I find the Action Alternative, as proposed, meets the intent of the project objectives as stated in *Section I – Type and Purpose of Action*. The Action Alternative is designed to address the need for an alternative septic system to the existing condition on steep slopes above Whitefish Lake while compensating the State for the full market value of the property encumbered. The Action Alternative may in the future also provide easements for driveways, utilities and uneconomic remainders of State Land located between Brittell’s Point of Pines Subdivision and East Lakeshore Drive. The Action Alternative addresses the need for a septic system in a way that:

- Only the electrical and control panel enclosure, a single-phase electrical transformer and the access covers would be visible.
- The clearing of vegetation and forest would be limited to approximately 1.2 to 1.5 acres.
- The system would be located 930 feet from the nearest surface water and over ¼ mile from Whitefish Lake on relatively level ground.
- Monitoring of effluent is required every 3 months by the DEQ in order to calculate actual loads of nitrogen and phosphorus being discharged to the groundwater.
- The system will be located adjacent to an existing county road easement and utility easement and should not substantially devalue adjacent State Lands or limit other opportunities to generate revenue.

26. SIGNIFICANCE OF POTENTIAL IMPACTS: After a review of the scoping documents; project file; engineering design; this Checklist Environmental Assessment; Department policies; standards, and guidelines; I find that all of the identified resource management concerns have been fully addressed. Specific project design features and various recommendations of the resource management and engineering specialist have been implemented to ensure that this project will fall within the limits of acceptable environmental change. No project activities are being conducted on important fragile or unique sites. In summary, I find that the identified adverse impacts will be controlled, mitigated, or avoided by the design of the project to the extent that the impacts are not significant.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

- EIS
 More Detailed EA
 No Further Analysis

EA Checklist Approved By:	Name: Brian Manning	
	Title: Unit Manager	
Signature: /s/ Brian Manning		Date: 9/30/10