



## MEETING AGENDA

### KELSO STORMWATER ADVISORY COMMITTEE

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DATE: May 26, 2010

TIME: 4:00 pm – 5:00 pm

LOCATION: Kelso City Hall, Suite 203

#### Unfinished Business

- 1) February 22, 2010 meeting minutes approval
- 2) Comments and Review Nutrient, Integrated Pest Management and Herbicide Plan Draft



Kelso Stormwater Advisory Committee Meeting  
May 26, 2010 @ 4:00 p.m.  
City Hall Conference Room 203  
203 S. Pacific Ave.

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Attendees:

1. Don Lemmerts
2. Tim Wines
3. Gloria Nichols
4. Van Moky
5. Steffanie Taylor
6. Greg Bruchert
7. Sam Howell
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_



Engineering Phone 360-423-6590  
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## CITY OF KELSO

Public Works Department  
203 S. Pacific Ave., Suite 205  
PO Box 819  
Kelso, WA 98626

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### Stormwater Advisory Committee Meeting

February 22, 2010

#### Call to Order:

Steffanie Taylor called the meeting to order at 4:06 p.m., at City of Kelso City Hall, 203 S. Pacific Ave., Suite 203.

#### Those present were as follows:

##### Advisory Committee Members:

Gloria Nichols  
Tim Wines  
Steffanie Taylor  
Dan Howell  
Don Lemmons  
Gary Fredricks

##### Staff:

Van McKay, City of Kelso  
Stephanie Helem, City of Kelso

#### Also in attendance:

Josh Johnson, City of Longview

#### Approval of Minutes:

Dan Howell made the motion, seconded by Gary Fredricks to approve the minutes of January 6, 2010. Motion carried, all in favor.

#### Unfinished Business:

##### 1. Terms of Office

Steffanie Taylor's term as Chairperson ended December 31, 2009. Tim Wines will become the new Chairperson with his term ending December 31, 2010. Dan Howell and Gary Fredricks have agreed to extend their terms for an additional 2 years ending December 31, 2011, with Dan Howell becoming the new Vice-Chairperson.

Dylan Olson has declined to continue his term. Van McKay will work on a replacement for the Advisory Committee Youth Member.



## 2. Kelso Engineering Design Manual Chapter 4 Stormwater Drainage Review

A review and discussion of the draft KEDM Chapter 4 was performed. The draft copy provided had been revised from the version presented at the January 6, 2010 meeting and the changes were based upon the January meeting comments and review comments received from contracted City Engineer Patrick Harbison. The following items were discussed:

- I. Section 4.01 (D)(4) General
  - Brief overview and clarification on language change to include Flood Plan to be compliant with permit requirements.
- II. Section 4.03 Exemptions and Variations
  - (B)(1) State Flow Control
    - i. Brief overview of language change to include flow control over 1 acre to abide by local requirements.
  - (B)(4) Amenity
    - i. Added definition. Brief discussion followed and it was decided to remove and add amenity definition to Chapter 1 of the KEDM.
  - (B)(5) Small-lot Dispersion
    - i. Additional language was added to be more specific.
    - ii. Spell out sq.ft. (Van will globally search the document)
  - (B)(7)(a) Basin Planning
    - i. Brief overview of language change referring to SMMWW.
  - (B)(8) Other Manuals Accepted
    - i. Brief discussion on manuals accepted.
- III. Section 4.04 (C) Overview of Development Requirements
  - Brief overview of addition to language including local and state flow chart directory.
- IV. Section 4.05 (A) Applicability
  - Discussion and clarification on language changes. 5,000 square feet is included in flow chart. Suggestion was made and all agreed to strike last sentence "Projects creating than....".
- V. Section 4.05 Local Requirements for Development and Redevelopment
  - (B)(2) Discussion on volume being included in section. Suggestion was made and all agreed to strike "volume, rate, or location" from sentence. Revised sentence to read "A development or land disturbing activity may not change the surface or subsurface flow to or from an adjacent property without.....".
  - (B)(3) Brief overview of language changes.
  - (B)(4) Brief overview of addition of language was taken from the City of Longview Manual.
  - (B)(5) & (B)(6) Brief overview of language changes from previous meetings review and comments.
  - (C)(1) "Section XX" to be clarified by Van. Stormwater word spelling correction.
  - (D)(2)(c)(i)
    - i. Revised sentence to read "...of the cost of the stormwater facility is provided...".
    - ii. Suggestion made to strike wording in red.
  - (E)(2) Brief overview and discussion regarding language being similar to the City of Longview manual.
  - (E)(5)(a)(iv) Suggestion was made and all agreed to change "Shall" to "Should".
  - (E)(5)(b) Suggestion was made and all agreed to change "may" to "should".
- VI. Section 4.06 (A)(2)(5) State Requirements
  - "Section XX" to be clarified by Van.

- VII. Section 4.08 Standards for Dispersion and Infiltration
  - (B)(2) & (B)(3) Brief overview of language changes.
  - (C) Brief overview and discussion of table.
- VIII. Section 4.09 Local Credits
  - (G) Tree Credits. Brief overview of language changes and additions. This was the most rewritten section of this chapter.
  - (G)(1) Spell out inches and feet. Global document search.
  - (G)(1)(d) Suggestion was made and all agreed to remove "City". Revised sentence to read "Be deemed by a forester certified by..."
  - (G)(2)(a) Change wording from "City of Longview" to "City of Kelso".
  - (G)(3) Brief discussion on tree credits and the viability of the tree in the parking strip/island area.
  - (G)(3)(b)(iii) Add comma to 1,000.
- IX. Section 4.11 Simplified Infiltration Test.
  - Brief overview and discussion of added paragraph referring to Appendix E.
- X. Section 4.13 Closed Conduit Systems
  - (A)(4)(a) Spell out feet.
  - (A)(5) Spell out inches.
  - (A)(7) Brief overview of language changes from several sentences to one.
  - (A)(10) Comma after "culverts".
- XI. Section 4.14 Open Conveyance
  - Brief clarification on language changes.
- XII. Section 4.15 (B) Private Drainage
  - Change language from "hat" to "that".
- XIII. Section 4.19 Stormwater Performance Bond
  - Brief overview of Ordinance Handout was given. City attorney is currently reviewing ordinance language regarding performance bond. Upon approval ordinance language will be copied to KEDM Chapter 4.
  - Discussion regarding the difference between 125% vs. 150% Performance Bond and Private vs. Public. Motion was made on approving 125% Performance Bond value. Motion carried 5 to 1.

**Motion:**

Dan Howell made the motion, seconded by Steffanie Taylor, "Recommending adoption by City Council approval of Chapter 4 with changes made". Motion carried, all in favor.

**Other Business:**

Timeline - Development Ordinance, KEDM Chapter 1, 2, & 4 will be presented at the March 2, 2010 Council Meeting for the 1<sup>st</sup> Reading. 2<sup>nd</sup> Reading of the Ordinances will be presented at the March 16, 2010 Council Meeting and upon approval will be effective 5 days after this date.

The Kelso Stormwater Advisory Committee will need to be formed as long as the NPDES Permit is active. At the end of each member's term they have the option to leave their position. Van is asking if the members do decide to leave to possibly recommend future members to take their place. Van is recommending meetings occur at least quarterly to discuss maintenance issues or discuss changes in the code.

**Next Meeting:**

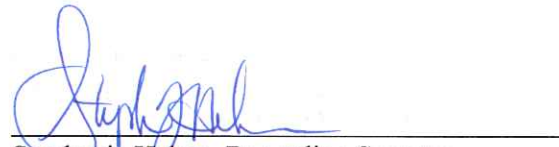
No future meeting has been scheduled at this time.



Meeting adjourned at 6:16 pm.

Approved:

  
\_\_\_\_\_  
Tim Wines, Chairperson

  
\_\_\_\_\_  
Stephanie Helem, Recording Secretary

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**CITY OF KELSO  
NUTRIENT, INTEGRATED PEST MANAGEMENT  
and HERBICIDE PLAN**

PREPARED May 28, 2010

**TABLE OF CONTENTS**

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I. OBJECTIVE .....	2
II. SCOPE .....	2
III. BACKGROUND .....	2
IV. QUALIFIED PERSONNEL .....	2
V. DESCRIPTION OF PROPERTIES .....	3
VI. BEST MANAGEMENT PRACTICES .....	6
VIII. MANAGEMENT & CERTIFICATION .....	9

DRAWING: AIRPORT HERBICIDE PLAN

APPENDIX A State License Holders

APPENDIX B Preventative Maintenance Program Sheets

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### I. OBJECTIVE

The objective of this Nutrient, Integrated Pest Management, and Herbicide Plan (Plan) is to reduce pollutants in discharges from all lands owned or maintained by the City. The major goal is to minimize manmade chemicals' entry into surface and groundwater resources by managing the:

- Amount, method, timing, and source of fertilizer, herbicide and pesticide applications, and
- Operation and maintenance activities that have a potential to release nutrients.

### II. SCOPE

This Plan addresses City of Kelso (City) practices regarding fertilizers, pesticides, and herbicides including maintenance of vegetation in parks, right-of-ways and other City properties.

### III. BACKGROUND

The City Operations Division has policies and practices for application of fertilizers, pesticides and herbicides on City managed facilities. These facilities include road right-of-way, the ~~Kelso-Longview~~Southwest Washington Regional Airport, reservoirs and pump stations, the water treatment plant and parks. City park classifications include regional park, neighborhood park, neighborhood play lot, neighborhood open spaces, trails and undeveloped open spaces. A description of these parks are listed below.

The City's Western Washington Phase II Municipal Stormwater Permit (Permit) requires that a nutrient management and an integrated pest management plan be developed. This document fulfills this requirement that is stated in section S5.C.5.g of the Permit

### IV. QUALIFIED PERSONNEL

Operations has certified and highly experienced staff responsible for the use of herbicides and pesticides. Table 1 below shows the City's pesticide/structural pest inspector (SPI) license holders and their certifications. Their state licenses are shown in Appendix A, State License Holders. License holders are supervised by the Operations Superintendent, Randy Johnson, 577-3360. ~~Tom Powers, a Parks Maintenance Technician~~Other employees also ~~applies~~apply herbicides but within eyesight of ~~Tim Maekina~~licensed applicator and this practice is allowed by the state.

Table 1: City of Kelso pesticide SPI license holders and their certifications

<i>City of Kelso Resources</i>	<i>Certification</i>	<i>Phone</i>
Tim Mackin, Parks Lead	Ornamental Weeds	577-7119
Roger Harper, <u>Traffic</u> /Facility Maintenance Lead	Ornamental Insect & Disease; Ornamental Weed; Rights-of-Way Weed	577-3363
Steve Moyer, Traffic Technician	Ornamental Weed	577-3245

**V. DESCRIPTION OF PROPERTIES (greater than ¼ acre)**

- A. Tam O’Shanter Park: A multi-seasonal regional park, Tam O’Shanter is a 38-acre park south of Kelso High School and adjacent to the Coweeman River. Landscaped areas include a multi-purpose soccer field, three girls fast-pitch softball fields, one Babe Ruth field, five Bambino fields, and a children’s playground, as well as other grassed and vegetated areas.
- B. Catlin Spray Park: This 0.8-acre neighborhood park is located on the corner of Cowlitz Way and Main Street and includes a water spray play area, benches, picnic tables, the Senior Center, restrooms and landscaping.
- C. Rotary Park: Rotary Park is four-acre neighborhood park and is located to the east of Interstate 5 off of Burcham Street. The park consists of a playground, a covered picnic area, restroom facilities, open field space, and a skateboard park.
- D. Manasco Park: This 1.9-acre neighborhood park has five youth soccer fields and two restrooms and is located at the 1800 block of South River Road S.
- E. Lads & Lassies Park: Located at the corner of 8<sup>th</sup> Avenue and Elm Street, this fenced play lot has a playground, park benches, trash receptacles, picnic table and a bike rack. The park is used year-round by the surrounding community.
- F. Scot Hollow Park: This three-quarter-acre open space is located at the intersection of 19<sup>th</sup> Avenue and Bates Street. The facility consists of a picnic table, park bench and an open field for play. It is used mainly in the spring, summer and fall months for relaxation and play.
- G. Kelso Commons: This quarter-of-an-acre neighborhood open space is located in the business district on the corner of Pacific Avenue and Oak Street. The facility consists of picnic tables, park benches, trash receptacles, media building, drinking fountain, lawn and vegetation, and a memorial structure. The mini-park is intended for day use by people visiting the business district.



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- H. Kiwanis Park: This one-third acre neighborhood open space is located at 121 Allen Street just west of the Interstate 5. The bench and landscape area provide a quaint respite for pedestrians and travelers.
- I. Peter Crawford Home Site: The ~~city~~City maintains a one-acre neighborhood open space along the east bank of the Cowlitz River near the intersection of Crawford Street and 1<sup>st</sup> Avenue. where the City's founder, Peter Crawford, once lived.
- J. Rhododendron Gardens: This quarter-of-an-acre neighborhood open space at Pacific Avenue North and Harris Street is strictly for passive purposes. There is no development; the area consists of a rhododendron garden.
- K. Trails: Kelso's urban trail system is a combination of on and off-road trails that provides a network of recreation, transportation and wildlife habitat viewing corridors around the ~~city~~City. The trails are located and designed to provide neighborhood links to commercial areas, schools, parks, employment centers, wildlife habitat areas, and also promote green space. The Cowlitz River trail follows the Cowlitz River dike from Cowlitz Gardens to Mill Street. The trail is paved and lighted and is 1.5 miles within Kelso. The Coweeman River trail is 3.7 miles within Kelso and it follows the Coweeman River dike from Talley Way to Tam O'Shanter Park, ending at Allen Street and Corduroy Road. The trail is gravel with a series of park benches.
- L. Camilla Summers River Front Park: This undeveloped open space is five acres in size and is located on the Cowlitz River between the Allen Street Bridge and the old water treatment plant. ~~Within this five-acre area are three privately-owned parcels, totaling approximately seven tenths of an acre.~~
- M. Harts Lake Recreation Area: This 248-acre parcel of land was donated by the Department of Natural Resources and is located adjacent to the Aldercrest landslide area along the Coweeman River east of Interstate-5. The parcel consists of timber, Coweeman river wetlands, and wildlife habitat. The Coweeman River flows through the northern portion of the site, creating a seasonal lake during wintertime. There is no public access to the lake at this time, other than from the Coweeman River.
- N. Aldercrest Open Space: An undeveloped open space 10 acres in size is located east of the intersection of Banyon Drive and Grimm Road. The site has limited access. ~~Interstate 5 acts as a man-made access barrier to the west.~~
- O. Water Treatment Plant: The City water treatment plant is located at 703 South First Avenue. At the plant there are buildings, pavement and lawns. The lawns are maintained by City staff.

- P. Water Reservoirs, Water and Sewer Pump Stations: At twenty-one locations in and around Kelso are water reservoirs, water pump stations and sewer pump stations. Approximately half of these have landscaping.
- Q. Kelso Regional Airport: The Kelso Regional Airport in south Kelso is approximately 109 acres in size and includes buildings, pavement and grassed areas.
- R. Right of Ways: The road and shoulder areas in the City of Kelso.

## VI. BEST MANAGEMENT PRACTICES

The City has a minimal approach towards the application of nutrients, pesticides and herbicides and these are applied only when necessary and appropriate. General comments for nutrients, pesticides and herbicides are stated below and with more detailed best management practices for each facility noted in Table 2: Best Management Practices. The City's procedures for vegetation management are detailed in Preventative Maintenance Program Sheets that are found in Appendix B, [Preventative Maintenance Program Sheets](#).

### A. Nutrients

The City has a limited program on the use of nutrients (fertilizers) such as nitrogen, phosphorus and potassium (NPK). Fertilizers are applied at Tam O'Shanter Park, [Kelso City Hall](#) and Manasco Park by representatives from local baseball leagues. Weed & Feed is commonly applied.

Mowing of City properties is performed to keep grasses and weeds down and to provide a clean and well-kept look. This practice allows the cuttings that are left on the surface to return to the soil as nutrients. Mowing also controls pests that flourish in taller vegetation.

### B. Pesticides

The City does not use pesticides except for sporadic and isolated instances. For example, over-the-counter bug spray (pesticide) is used on bees that establish nests in telemetry control boxes for water reservoirs.

### C. Herbicides

The license holders apply herbicides in a manner consistent with manufacturers instructions that are based upon state guidelines. For examples, herbicides are applied during dry weather with no wind and are not applied close to the water such as at Tam O'Shanter Park. The Airport, right-of-way, Cowlitz River dike trail, and reservoirs are sprayed once a year during the Spring.



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The Parks staff applies the following herbicides: SpeedZone broadleaf herbicide for turf, Crossbow low volatile weed and brush herbicide, Hi-Yield Killzall 2, and Casoron 4G dichlobenil weed and grass killer. The Facilities staff applies the following herbicides: Crossbow, Hi-Yield Killzall, Escort, Oust, and LI-700. Chemicals are stored in cabinets with safety placards.

**Table 2: Best Management Practices**

<b>Best Management Practices</b>		
<b>Facility</b>	<b>Practice</b>	<b>Nutrients (N) Herbicides (H)</b>
Tam O'Shanter Park	Fertilizer is applied only in the ball field areas, not soccer fields, two times per year. Weed & Feed is applied on grass by representatives from local baseball leagues. Herbicides are used to control weeds in areas not accessible by mowers and this includes fence lines, park tables, buildings, rocks and shrubbery. Types of vegetation include grasses, blackberries, horsetail and clover. Herbicides are applied 4-5 times per year from spring through August/September. In the ball fields, the City picks up the grass clippings on the first mowing of the year, typically in March. Otherwise, clippings are left to supply nutrients to the soil.	N, H
Catlin Spray Park	Herbicide is applied around the building. Leaves are picked up in the Fall.	H
Rotary Park	Herbicide is applied around the building and restroom. Grassy areas are mowed. Leaves are picked up in the Fall.	H
Manasco Park	Fertilizer is applied to the soccer field areas.	N
Lads and Lassies Park	Grassy areas are mowed.	
Scot Hollow Park	Grassy areas are mowed. Leaves are picked up once in the Fall.	
Kelso Commons	Grassy areas are mowed. Leaves are picked up in the Fall. Moss control is applied for safety on the sidewalks in January/February to minimize slipping and falling hazards.	H
Kiwanis Park	The Kiwanis club pulls weeds and installs bark mulch for weed control.	
Peter Crawford Home Site	A strip of grass next to the road is mowed.	
Rhododendron Gardens	Grasses are mowed and weed-eaters are used. Bark dust is applied for weed control and visual appeal. Leaves are picked up in the Fall.	
Trails	The Coweeman River dike path is mowed by the City, paid for by CDID#3, and herbicide is used 3 feet on each side of the trail. The Cowlitz River dike path is sprayed one-foot off each side of the pavement.	H
Camilla Summers River Front Park	The City picks up litter in this park with the use of jail crews.	
Harts Lake Recreation	The City leaves this area to develop naturally.	

Best Management Practices		
Facility	Practice	Nutrients (N) Herbicides (H)
Area		
Aldcrest Open Space	The City leaves this area to develop naturally.	
Water Treatment Plant	The water treatment plant has a grounds maintenance program to ensure the grounds, that includes lawns, are clean and well kept. Previous to this plan, lawn fertilization was performed in the spring and the fall as soil quality was poor when the lawn was installed in 2002. The program has changed, on a trial basis, where the lawn will not be fertilized. Also, during mowing, grass clippings will be left on the lawn for thatching. The program includes inspection for excessive thatch that creates a favorable environment for pests and disease and an unfavorable growing environment for grass roots. If the lawn can thrive with no fertilizer and satisfactory thatching, the City will consider permanently adopting this practice. Herbicide is used along the fenceline, buildings and at cracks in the pavement to control vegetation that is not accessible by mowers.	H
Water Reservoirs, Water & Sewer Pump Stations	Several of the water reservoirs and some of the pump stations have grasses and weeds. These are mowed/trimmed by mowers and weed eaters. Weeds are sprayed along fencelines and in some instances all areas around reservoirs.	H
Kelso City Hall	A small patch of lawn on the north side of the building is applied with Weed & Feed. This grassy area is mowed.	N
Kelso Regional Airport	The Kelso Regional Airport has large areas of grass that are mowed. Herbicides are applied in many locations for safety and ease of mowing. Significant locations for herbicide application include the perimeter fences, buildings, seg-circle and runway lights. A drawing (See Figure: Airport Herbicide Plan) shows locations for spraying.	H
Rights of Way	Herbicide is applied along the Academy St. guardrail and the Allen Street curb line. Kelso Drive and Old Highway 99 shoulders are sprayed to keep vegetation off of the driving surface.	H

D. Restriction of Nutrient Entry into Surface and Ground Waters

- 1) Do not apply fertilizer on saturated soils, storm drains, surface water, wetlands, or impervious surfaces [Note: Sweep-up fertilizer inadvertently applied to pavement (sidewalks, etc.)].
- 2) Do not apply nutrients to frozen soils unless the fertilizers are used to melt snow or ice on high traffic turf areas.



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- 3) Take action to avoid drift of fertilizer into waterbodies, such as when liquid fertilizers are applied repetitively or when granular fertilizer is applied without an unfertilized vegetative buffer strip surrounding the waterbody.

### E. Vegetation Management

The following practices should be followed for vegetation management.

- 1) Keep storm drains clean and clear of debris.
- 2) Sweep-up ~~or and~~ coordinate with the street sweeper if generating clippings or other vegetative wastes in the street (or ~~city~~City parking lots).
- 3) Do not sweep, blow, or rake vegetation to rivers, ponds, or sloughs.
- 4) Herbicide use is limited to licensed applicators or as otherwise prescribed by state law.
- 5) The leaf maintenance program policy is to pick-up leaves in the City parks and facilities. The scheduled time is from mid-October through late November.

### F. Operation and Maintenance

- 1) *PPE.* The applicator shall wear protective clothing appropriate to the material being handled as per the material's Material Safety Data Sheet (MSDS).
- 2) *Storage.* Protect fertilizer from the weather, and from accidental leakage or spillage.
- 3) *Mowing Height.* Ideal height varies with grass type. Frequent mowing will result in short clippings that can be left on the lawn. Ideally, cut no more than one-third of the height of the grass blades. Mowing blades should be kept sharp to prevent tearing.
- 4) *Irrigation.* Deep watering similar to a soaking rain is best. ~~Water-in fertilizers placed on slopes.~~ Use enough water to deliver the product without causing runoff (which carries unwanted nutrients, clippings, and animal feces to surface waters).
- 5) *Thatch Build-Up.* If thatch buildup occurs that interferes with the intended use of the turf (over 1/2 inch thick) it may be necessary to remediate with core aeration. Excessive thatch build-up may be a sign of overuse of fertilizer, increasing soil compaction, or poor root development.

### G. Animal Waste

The City has purchased 3 pet waste stations and these will be installed in the near future. One pet waste station will be located at the Catlin Spray Park and two others will be located at Tam O'Shanter Park. Citizens are encouraged to use

the plastic bags that are dispensed at the pet waste stations to pick up after their pets.

## VIII. MANAGEMENT

### *Duty to Comply*

This Plan for nutrient and integrated pest management is required under section S5.C.5(g) of the City's Phase II Municipal Stormwater Permit. It may be necessary for planners and field staff to take precautions beyond the minimums contained within the criteria to account for such concerns as site hydrology, turf quality, and the potential for nutrients to enter water bodies.

### *Training*

All persons who manage, handle, use, and or apply nutrients on public property shall receive periodic training on the contents of this Plan, including for new products or strategies, plan updates, and personnel changes. Training shall be conducted by/with the qualified person(s) listed in the plan. Training records will be kept in the Engineering Department for inspection by Ecology.

### *Revision*

The plan shall be revised as needed ~~or at a minimum of every five years~~ by qualified persons to reflect changes in vegetation and/or management objectives.