Appendix M:

Geographic Information System

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Extensive use was made of the Forest GIS database and GIS analysis tools in conducting the analysis for this FEIS. GIS information is developed from field gathered information. In addition to the sample queries listed below numerous specialized queries were made by GIS for resource specialists.

Sample Listing of Specialist Maps and Data Produced and Filed in the Project Record

- Noxious Weeds and Sensitive Soils
- Noxious Weeds and Soil Types
- Know Noxious Weed Sites as of 2003 and 2005
- Noxious Weed Sites within 10, 100, 150, 300 feet of lakes and streams and 50 feet of springs
- Noxious Weed Sites in Relation to TES Wildlife Species and MIS Habitat
- Noxious Weeds by Watershed
- Noxious Weeds by Range Allotments
- Noxious Weeds and TES Plants and MIS Habitat
- Noxious Weeds within ¼ mile of Campgrounds.
- Noxious Weeds within ¼ mile of a road.

Sample Listing GIS Layers Utilized in Analysis

- Transportation
- Water Resources
- Soil Resources
- Wildlife Resources
- Range Allotments and Improvements
- Land Ownership
- Land Allocations of Forest Plan as Amended
- Recreation Developments
- Cultural Resource Inventory Areas

Data Accuracy

The Forest Service uses the most current and complete data available. GIS data and product accuracy may vary. They may be developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation, incomplete while being created revised, etc. Using GIS products for purposes other than those for which they were created may yield inaccurate or misleading results. The Forest Service reserves the right to correct, update, modify, or replace GIS products without notification.

If a map contains contours, these contours were generated and filtered using the Digital Elevation Model (DEM) files. Any contours generated from DEMs using a scale of less than 1:100,000 will lead to less reliable results and should only be used for display purposes only.

The analysis is based on gross acres and refers to the site size used for analysis. Noxious Weed Inventories utilize points and polygons to identify sites. In this analysis all points were counted as a tenth of an acre (0.10) although they may actually cover less area. Like wise an infestation that was identified as 200 acres may actually only have an infestation covering a net area of only 10% or 20 acres while the FEIS evaluation was conducted at the larger 200 acre size. For this analysis effects were analyzed on the gross acres of the site while the proposed action is to treat net acres.

Treatment will be based on net acres which is the actual area covered by a noxious weed species that will be treated - using the example above would mean treating the 20 acres of the 200 acre site. Net acres can vary from year to year depending on growing conditions, time of year, and noxious weed vigor.