FOREST MANAGEMENT
MONTANA FISH, WILDLIFE AND PARKS

Montana Environmental Quality Council
March 20, 2014

Outline

2

- Background
- Forest Yield Study Process (Overview)
- Yield Study Results
- Next Steps
- Current or Recent Forest Management Projects

Background

3

FWP Mission:

Montana Fish, Wildlife & Parks, through its employees and citizen commission, provides for the stewardship of the fish, wildlife, parks, and recreational resources of Montana, while contributing to the quality of life for present and future generations.

Background

4

Broad Goals of Wildlife Management Areas (ARM 12.9.509)

- Provide wildlife habitat and compatible outdoor recreation for now and future generations
- Sustain ecological systems
- Minimize conflicts between wildlife values and agricultural, economic, and cultural values
- Add to quality of life
- Conservation of soil, water and biological communities

Background

5

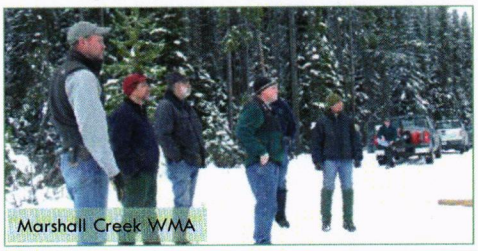
FWP Forestry Statutes

- MCA 87-1-621 Forest Management Account
- MCA 87-1-622 Forest Management Plan – Sustainable Yield Study
- MCA 87-1-201(9,iv) – FWP Powers and Duties, Forest Mgt. Plan on fire mitigation, pine beetle infestation, and wildlife habitat enhancement, priority for properties with 50 acres or more forest

Yield Study Process

6

- 64 FWP properties that supported 50 acres or more of forest
  - WMA – 37 properties, 141,500 forest acres
  - FAS – 7 properties, 400 forest acres
  - SP – 20 properties, 9,500 forest acres

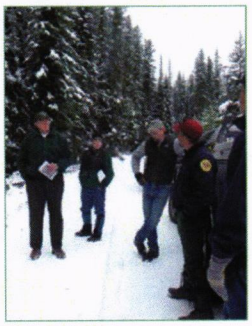


FWP Forest Work Group with contract foresters setting up yield analysis parameters

Yield Study Process

7

- FWP hired forestry firm Mason, Bruce and Girard, Inc. through an RFP process
  - Three subcontractors, including 2 from Montana and 1 from northern Idaho
- Contract cost $522,000



Yield Study Process

8

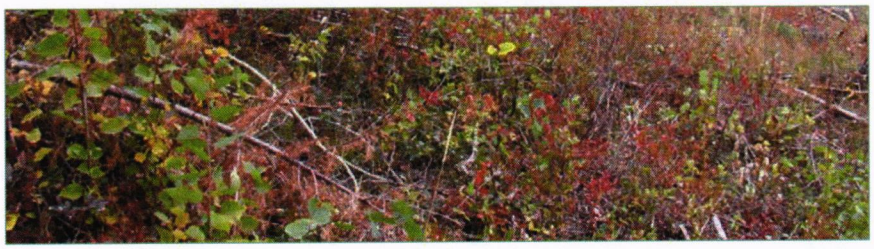
Forests were categorized into Ecological Settings (functional groupings)

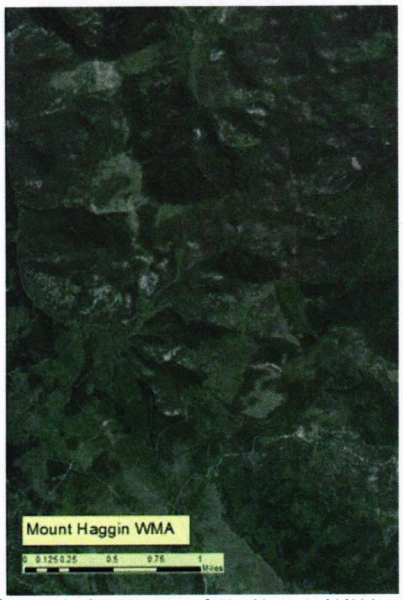
- Riparian
- Aspen
- Foothills Big Game Winter Range
- Forested Big Game Winter Range
- Upper Elevation Montane Forest
- Public Use Facilities

Yield Study Process

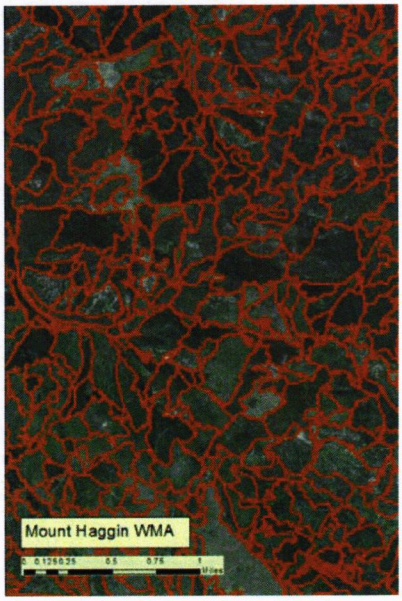
9

- Contractor identified forest stands
- Grouped into forest types
- Conducted forest inventory
  - 2,364 field inventory plots were established on 151,000 acres of potential commercial forests





10 Aerial of a portion of Mt. Haggin WMA



Sample of delineated Forest Stands

Yield Study Process - Constraints

11

- Subject properties (360,000 ac.)
- Potential Commercial Forest* (151,000 ac.)
- Operable Commercial Forest (122,000 ac.)
- Administratively available (57,000 ac.)

*As identified by Department of Revenue

Yield Study Process - Constraints

12

Potential Commercial Forest (151,000 acres)

Land that can grow 20 cubic feet of timber volume per acre per year.

Operable Forest (122,000)

- Slopes less than 60%
- Forest outside of 300' wet buffers (streams, lakes, wetlands)

Wetland habitat and associated forest, important for grizzly bears and other wildlife.

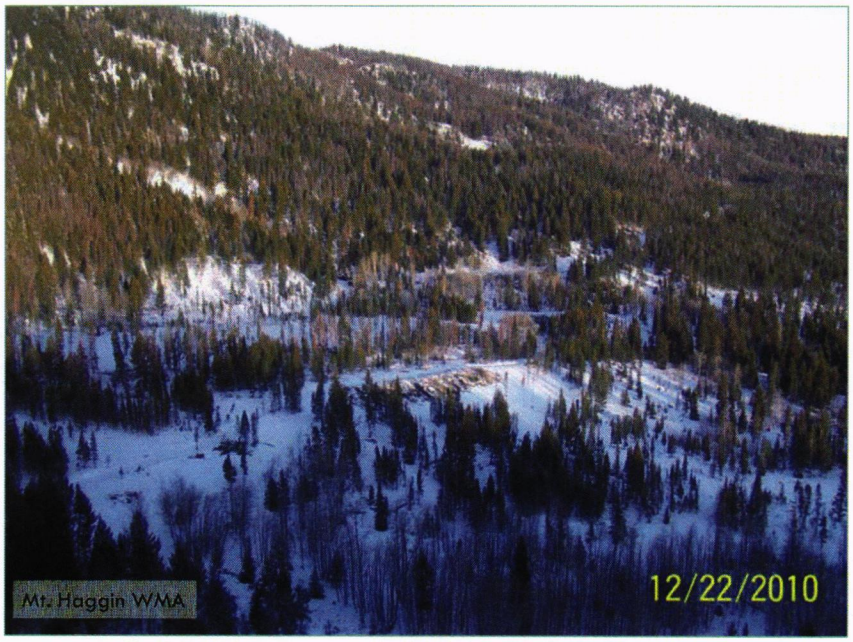
13

Yield Study Process - Constraints

14

Administratively withdrawn acres:

- Properties dominated by riparian habitats
- Isolated parcels with no legal road access
- Scattered patches and stringers with high wildlife values, limited forest management opportunity
- Mountain foothill habitat with a fringe of upper slope forests, steep rocky terrain
- Forested boulder fields
- Areas isolated from roads, economically impractical



15 Timber harvest unit bordered by steep upper slopes and boulder fields.

Yield Study Process - Constraints

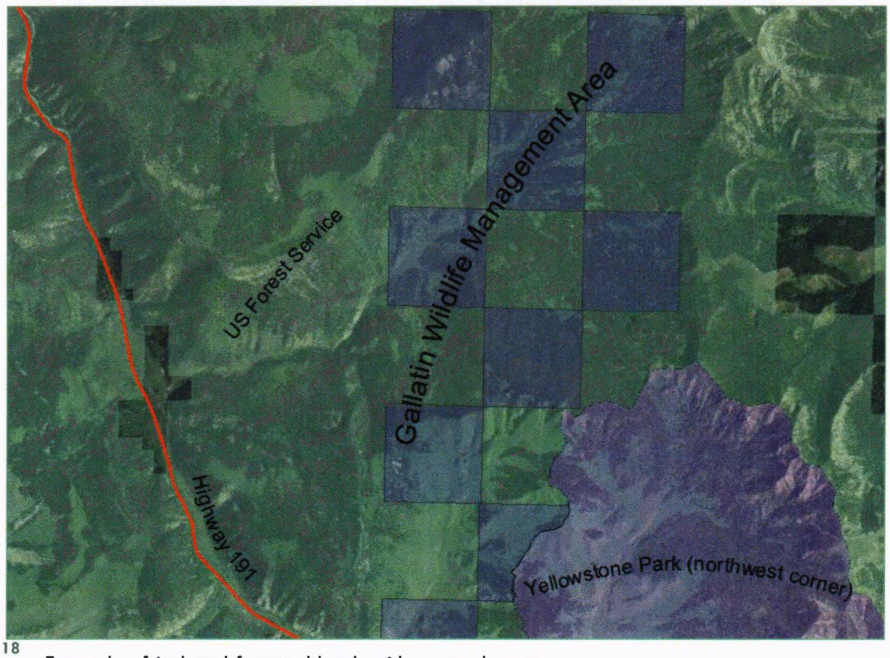
16

Administratively withdrawn acres (continued):

- Roadless headwaters with sedimentation concerns for native trout (e.g., threatened bull trout)
- Sound and view shed buffers
- Recreation sites that lack substantial tree cover
- Incompatibility with primary wildlife habitat objectives
- Low productivity
- Typically a combination of these factors

Example of property dominated by riparian forest and low productivity uplands

17

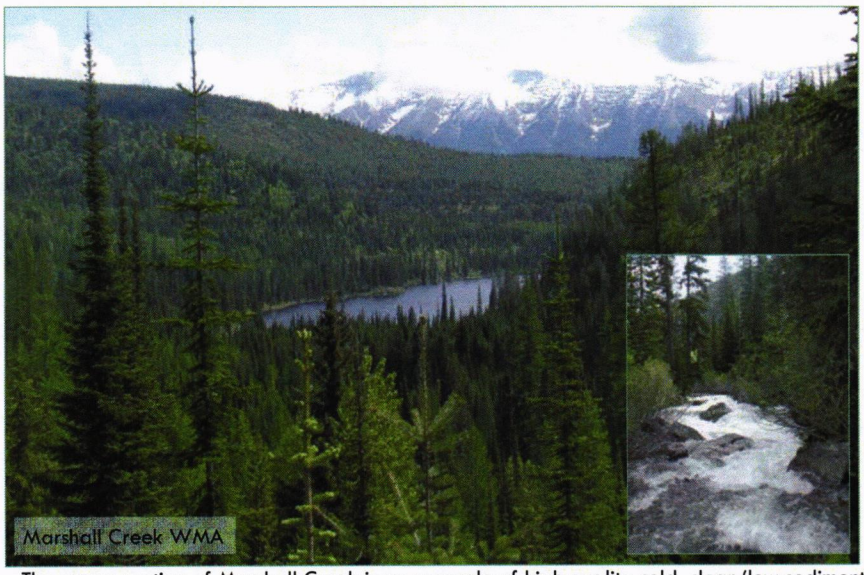


18

Example of isolated forested lands with no road access.

19 Example of administratively withdrawn forest, small patches and no road access.

20 Example of spruce/fir, multi-storied stand with dense understory structure – this stand was withdrawn to manage for high quality Canada Lynx habitat.



The upper portion of Marshall Creek is an example of high quality cold, clear (low sediment) spawning habitat for the threatened Bull Trout (inset). Due to sedimentation potential, harvest of forest stands on principle headwaters for Bull Trout spawning tributaries is generally not feasible.

21

Yield Study Process

22

Yield Analysis considered three acreages

- 151,000 acres potential commercial forest
- 122,000 acres of "operable" forest
- 57,000 acres administratively available

Yield Analysis applied two models to each acreage

- Benchmark (maximum sustainable yield)
- FWP Potential Yield (even and uneven aged harvest, reflecting wildlife habitat values)

Yield Study Results

23

Administratively available acres represent forest stands that are suitable for an active forest harvest regime, as fits with FWP's mission and site specific values that the department is charged with managing.

- Average Potential Yield on Administratively Available land (near term*) = **4.1 Million Board Feet per year** (89% WMA, 10% State Parks, 1% Fishing Access Sites)
- Average Potential Yield on Administratively Available land (long term) = **3.6 Million Board Feet per year**

*near term is within 50 years of present

Yield Analysis Results

24

The Study also provides:

- Yield estimates for individual properties;
- An inventory of stands with insect and disease damage, as well as recent fire impacts; and
- Recommendations to FWP relative to establishing a forestry program (Appendix F).

Next Steps

25

- Statewide forest management plan
- Continue with current and scheduled forest treatments
- Further develop forestry capacity
- Unit-level planning
- Continued implementation

Current and Recent Forest Projects

26

- Ovando Mountain (2012). Yielded 10,000 tons (approx. 1.4 MMBF). Forest health, aspen restoration. Gross: $17,000
- Mt Haggin 1 (2010-13). Yielded 12,000 tons (approx.1.7 MMBF) of commercial forest product, 400 acres treated. Beetle kill, aspen, enhance forest habitat. Gross: $2,500

27 Mt. Haggin I forest project.

Current and Recent Forest Projects

28

- Marshall Creek Blow down (2012). Yielded 353 tons (approx. 51 MBF) of commercial forest product. Cleared public roadway.

  Gross: $19,000
- Mt Haggin 2 (underway, 2013-14). Yielded 19,500 tons to date (approx. 2.8 MMBF). 950 acres intended for treatment. Beetle kill, habitat enhancement, safety/maintenance along routes, fuel breaks. Gross to date: $609,000

Current and Recent Forest Projects

29

- Gross Income since 2012: $647,000
- Expenses: $113,000
- Net Income: $534,000
- Yield since 2012: 42,000 tons or approx. 6 MMBF

Upcoming Forest Projects

30

- West Kootenai WMA (2014-15), 240 acres intended for treatment. Enhancement of forested winter range/forest health, fuel breaks. Currently hiring forester for overseeing project.
  - Funding assistance from DNRC grant
- Blackfoot Clearwater WMA - Dreyer Place (2014-15), 494 acres intended for treatment. Beetle kill, forest habitat enhancement, fuel breaks.

Upcoming Forest Projects

31

- Threemile WMA (2014-16), >2,000 acres intended for treatment. Beetle kill, forest habitat enhancement, fuel break.

L to R: Jim Cancroft (contract forester), Les Castren (Skyline Sportsman's Club), Vanna Boccadori (FWP Biologist), Ed Cheff (Logging), Sen. Jim Keane, Rep. Duane Ankney

32