Committee Members Present: Ken Bierly, Rick Brown, Dick Courter, Jim Johnson, Rod Krahmer, Dan Logan, Lois Loop, Alan McGuire-Dale (for Ray Abriel), and Jim Paul.

Guests: Chris Jarmer (Oregon Forest Industries Council), Charlie Krebs (USDA Forest Service Pacific Northwest Region), Michael Schindel (The Nature Conservancy)

Staff Present: Jeff Brandt, Jim Cathcart, Andy Herstrom, Norm Miller, Ryan Miller, David Morman, Emmor Nile, Kevin Weeks, Steve Wilson.

STATEWIDE ASSESSMENT AND RESOURCE STRATEGY

NEXT MEETING – Full day meeting, 10 am to 3 pm, Thursday, June 10th, Oregon Dept. of Forestry Headquarters, Salem. Lunch will be provided.

Spatial Analysis Methodology – Identifying Priority Landscapes

Priority Landscapes – Why are We Doing This?

The reason to develop the priority forest landscapes (a requirement of the State Assessment) is to coordinate the delivery of State and Private Forestry Programs funded under the Cooperative Forestry Assistance Act (i.e., USDA Forest Service State and Private Forestry Programs) in areas important to addressing priority issues, Forestry Program for Oregon goals, State and Priority National Themes and Sub-Themes. On the one hand – the priority areas define spatially a State’s level of need regarding what is important; but at the same, are not focused enough to target funding (and accomplishment) so the issue, goal, or theme is entirely addressed within the identified priority areas. The priority areas will not be limiting (i.e., there is no requirement that funds can only be used within high priority landscapes) but could be used for program accomplishment reporting (i.e., overall, did delivery of program funds address state priorities in areas deemed as high in importance). Another way to look at it – priority landscapes are being used as a program accountability tool – was program delivery in the right place – strategic in getting the biggest bank for the buck with respect to addressing issues, goals or themes?

Timberlands at Economic Risk Framework

Draft results of the “Timberlands at Economic Risk” spatial analysis were presented. See the PowerPoint presentation “Spatial Analysis Framework Timberlands at Economic Risk.ppt” for background and results. Two versions of the results were presented. (1) priority weighting scores were broken into “High”, “Medium” and “Low” using the quantiles (even distribution relative to the data) and (2) priority weighting scores broken into “High”, “Medium” and “Low” using the Jenks (natural data breaks) method. One fix that is needed is to remove the bias against eastern Oregon site productivity (currently weighted as less important) and stratify the site productivity weighting by western versus eastern Oregon.

Discussion: The two methods display distinctly different ‘footprints’ of the high priority areas with the quantiles method showing the smaller footprint. Confusion about the title of the framework (Timberlands at Economic Risk) verse what is being shown on the map. What is being shown as “High” in the framework are timberlands that are high site, wood production, wildland forest lands that become vulnerable because they do not have robust, competitive timber market opportunities during poor economic conditions. Vulnerable to what? Vulnerable to passive management (landowners no
longer make investments in management) or vulnerable to sale – perhaps to owners without forestry objectives (i.e., selling of higher valued parcels for non-forestry use such as resort development).

Good discussion on how big of a “High” footprint to show. Data may lose credibility if the “high” footprint is too large. Conversely, may shoot yourself in the foot if make the footprint to narrow in focus – don’t want to undersell your need. Also, important to communicate what is being shown or meant by high. If the purpose is to prioritize limited funds – want a very specific focus to “High”. (This discussion continued throughout the meeting based on the review/discussion around the other spatial analysis frameworks. One dynamic is the State Assessment shows a general prioritization of what is high, medium or low – strategic – than can be used to develop more focus priorities for program implementation. These more focused priorities could be developed through a competitive grant narrative or as (was learned in the Conservation Framework discussion) as part of the Resource Strategy. Group came around to agreeing that there is a need to make a decision about interpreting the range of priority ranking as “High”, “Medium” and “Low” with a leaning toward using the Jenks Method (seems to have a little more credibility amongst the GIS types). Also – a more general (larger) footprint in the State Assessment does not preclude the development of a more focused priority emphasis as an “idea” for program implementation in the Resource Strategy.

**Actions – Next Steps**

1. Come up with a better title/name for the framework. (Update: Perhaps “Forestlands Vulnerable to Loss of Timber Markets”).

2. Incorporate the following changes to the data layer attribute weights.
(3) State Assessment will display a raw priority rankings ‘score’ (in this case, color ramp the distribution of forestlands to reflect the distribution by discreet ranking ‘score’ – which in this case could vary from a low value of 1 to a high value of 16 - in addition to the priority landscape “High”, “Medium” or “Low” results. (This applies to all the spatial analysis frameworks).

(4) Next iteration of results – show both quantile and Jenks breaks for “High”, “Medium” and “Low”.

**Community Wildfire Protection Framework**

Draft results of the “Community Wildfire Protection Framework” spatial analysis were presented. See the PowerPoint presentation “Spatial Analysis Framework Communities at Risk of Wildfire.ppt” for background and results. The “High”, “Medium” and “Low” breaks in the priority ranking were determined using the Jenks method.

*Discussion:* The inconsistency between how the counties/communities developed and mapped their Wildland Urban Interface (WUI) shows too strongly in the results. Raises a flag. (WUI’s are identified as priority area for fuel reduction projects (as well as fire prevention and awareness activity) through the county’s Community Wildfire Protection Plan). Some counties developed large footprints for WUI’s – others were much more focused in developing their WUIs.
It was also brought up while this framework looks at wildfire as a threat – wildfire is a natural process that plays an important ecological role in forests. Fire is also a management tool. The narrative needs to reflect this.

**Actions – Next Steps**

(1) Use the Silvis Lab wildland urban interface area spatial data for Oregon instead of the Community Wildfire Protection Plan mapped WUI areas. See the map of the Silvis Wildland Urban Interfaces (Silvis_WUIs.jpg). The Silvis Lab wildland urban interface data was developed to a consistent national standard – so observed inconsistencies between the Community Wildfire Protection Plan WUI's is eliminated. Reference the Community Wildfire Protection Plan WUI's in the background – so recognition is given the county planning effort.

(2) Next iteration of results – show both quantile and Jenks breaks for “High”, “Medium” and “Low”.

(3) Make sure the positive role wildfire plays in Oregon’s forests is covered. Don’t label wildfire as just a “threat”.

**Urban and Community Forest Framework**

Draft results of the “Urban and Community Forest Framework” spatial analysis were presented. See the PowerPoint presentation “Spatial Analysis Framework Urban and Community Forestry.ppt”. The framework is a generalization of a pilot project already awarded through the State and Private Forestry competitive grant process for Jackson and Clackamas counties. The pilot is focusing on working with rural residents that own forestland on tax lots between 1.5 acres and 20 acres in size and are within a 5 mile radius of an urban center. The Urban and Community Forestry Program priority “landscapes” are: (1) High – Urban forestry programs that are either “Managing” or “Developing”, (2) Rural forest landowners on tax lots within 5 miles of an urban center between 1.5 and 20 acres, and (3) cities that have yet to initiate an urban forestry program. (Note: Four urban forestry components (tree ordinances, professional staff, inventory-based management plans, and advisory committees) define a “Managing” city. Must have at least 1 component to be “Developing”.)

**Discussion/Questions:**

- How are the tax lots/analysis data going to be used and/or distributed?
- Did the Urban and Community Forest Committee review the process outline in the grant?
- Is the Urban and Community Forest Committee going to review the results?
- These lands are the “gateway” to the watersheds. How is that being addressed and/or emphasized?

**Update/Next Steps (Based on a Follow-Up 4/30 Meeting with Paul Ries, Urban and Community Forest Program Director, Oregon Dept. of Forestry)**

(1) Display the urban-rural forest areas at the county level; dissolve the tax lot interior lines and just show the “area of” tax lots meeting the 1.5 to 20 acres as a single polygon differentiated by its development zone attribute (e.g., rural residential, agriculture, mixed forest-agriculture, forest).

(2) Process and results will be presented to the Urban and Community Forest Council on Friday, May 14th.

(3) Yes, there should be discussion regarding the pilot areas in Jackson and Clackamas County with neighboring National Forests. Nothing scheduled as of yet.
Conservation of Fish and Wildlife Habitats Framework

Draft results of the “Conservation of Fish and Wildlife Habitats” spatial analysis were presented. See the PowerPoint presentation “Spatial Analysis Framework Conservation of Biodiversity.ppt”. Kudos to The Nature Conservancy for taking the lead on this work. Biodiversity is evaluated with respect to 139 forest dependent species (both documented known (aka element) occurrences as well as modeled occurrence based on species habitat models). See "Forest Species List.doc”. (No data available for those species listed with strikethrough font.) In addition, coarse filter habitats for terrestrial (ecological systems vegetation) and aquatic freshwater habitats (based on physical/hydrological features) are included. Base data includes a biodiversity indexing of 6th field hydrologic unit classification (HUC) watersheds based on the relative abundance of an element occurrence, modeled occurrence, and ecological systems vegetation types with respect to terrestrial Eco-Region subsections; and the relative abundance of freshwater habitats with respect to the aquatic Eco-Region subsections the 6th field HUC is in. The spatial analysis (priority weighting) was done by using the Marxan model – a least cost “conservation portfolio” optimization tool. A conservation portfolio is a collection of 6th field HUCs that in total meet stated conservation benchmarks for element occurrence and modeled occurrence species targets as well as benchmarks for ecological system and freshwater habitat targets. The Marxan algorithm is a stochastic, iterative, solution algorithm that operates on the universe of all possible combinations of targets, benchmarks and groupings of 6th field HUCs to ‘solve for’ the best combination of HUCs that meet the conservation benchmarks at lowest “cost”. Cost is defined as the suitability of the land management class (with the management class of interest having the lowest cost) as well as in terms of deviations from meeting the conservation benchmarks. For the State Assessment, suitability was defined as private lands having the least cost; state, tribal and other government lands the 2nd least cost and federal lands the highest cost. This is because the conservation portfolios of interest (high priority areas) are those were private lands is a strategic component. The Jenks method was used to stratify the Marxan scoring of the HUCs into HIGH, MEDIUM and LOW categories. A fourth ranking category – never selected by Marxan – is also included. Results showed a good juxtaposition of the HIGH priority HUCs with the Conservation Opportunity Areas identified in the Oregon Conservation Strategy and the Conservation Opportunity Areas in The Nature Conservancy’s Ecological Portfolio. (Note: While the State Assessment Marxan solution was biased toward private lands, the set of HIGH HUCs was by no means restricted to private lands. Important federal, state, tribal and other government lands were selected as HIGH in conservation opportunity to the extent that there were no suitable alternatives for achieving the conservation benchmarks on private lands. In the end, we got what we thought we wanted – areas of importance containing a large proportion of private lands but in the context of other important public forestlands necessary to meet conservation benchmarks. Both are included as HIGH.)

Discussion: The size of the HIGH “footprint” discussion continued. Should the HIGH footprint be much more focused in recognition of very limited dollars available for conservation? Staff recommended that the Marxan HIGH footprint be used in the State Assessment to reflect the overall distribution of areas of high conservation importance (with a bias toward private lands) and a more focused subset of this footprint be developed as a conservation funding need in the Resource Strategy. The Committee accepted this approach.

Actions – Next Steps

(1) Michael Schindel (The Nature Conservancy) and Rod Krahmer (Oregon Department of Fish and Wildlife) will develop the focused conservation funding idea for inclusion in the Resource Strategy.
(2) The Marxan results will be finalized and the priority rankings computed using both the quantiles and Jenks methods. The final results will be based on the current species habitat models and will not incorporate the new Gradient Nearest Neighbor (GNN) species habitat models as these models still may not be available in the allowed time.

(3) The Marxan results and supporting data will be transferred from The Nature Conservancy to the Oregon Department of Forestry with the appropriate supporting documentation.

**Web Launch of Oregon Atlas**


See the “Data Description Oregon Forest Management Classes.doc” for an example of how the information on each map will be described and documented.

**Discussion**: Very nice. The initial launch should be labeled DRAFT to reflect that not all the maps and data description products are final. Second, there should be an “Acceptance of Liability Conditions” acknowledgement that the viewer must accept before a map can be downloaded. With these changes, the Committee is okay with the public launch for outreach purposes without further review.

**Actions – Next Steps**

- DRAFT public launch with Committee modifications is scheduled for the week of May 3rd.

**State Assessment/Resource Strategy Documents and Timeline**

See the respective Outlines for the State Assessment and Resource Strategy documents. See “State Assessment Outline.doc” and “Resource Strategy Outline.doc”. The timeline for completion and review is as follows (SFSCC – State Forest Stewardship Coordinating Committee)

**Discussion**: Make sure the fire is not portrayed as only a threat because of its important, positive ecological role in forests.

- May 17th – DRAFT Statewide Assessment and Resource Strategy Documents to SFSCC for Review
- May 18th – Coordination Meeting with USDA Forest Service National Forest Leadership Team (Required)
- May 24th – DRAFT Statewide Assessment and Resource Strategy Documents for Public Review and Comment (Closes June 9th)
- May 24th – Forest Legacy Program Review Packets Mailed to Oregon Counties (Public Comment Open) (Closes June 9th)
- May 25th or 26th – Coordination Meeting with Oregon Department of Fish and Wildlife (Required)
- June 9th – Project Update to Oregon Board of Forestry (Information Item) – Close of Public Comment Period
- June 10th – State Forest Stewardship Coordinating Committee Meeting (Review of Public Comment)
- June 18th – Final Documents Submitted for Approval to USDA Forest Service, Pacific Northwest Region.
Roundtable

- This was Jim Paul’s last meeting as Chair of the Committee. Jim has taken an Assistant Director (Land Management Division) job with the Department of State Lands effective May 1, 2010.

Future Meeting Date Confirmed: Thursday, June 10th.

Jim Cathcart, Ph.D.
Forest Resource Trust Manager
Oregon Department of Forestry