

Note:

1) If you would like to discuss these issues online please use the [FIT-BioSci-Discussion list](#)

2) For more information on this project see the BioScience home page at

<http://www.gis.state.or.us/coord/FrameLayers/BioFrame.html>

Issues

1. Clearly define project goals and objectives
2. Outline project management, funding
3. What sample design will be used
4. What plot design will be used
5. What is the spatial extent
6. What are the necessary attributes
7. What ancillary information is needed
8. Where will the data be stored and how will it be accessed
9. What basins will be used as a pilot
10. Best use of intern
11. Identify Products
12. Identify who will do what, by when

1. Clearly define Goals and Objectives

GOAL:

To conduct a statewide riparian inventory

OBJECTIVES

Evaluate data sources and methods

Evaluate and compare data sources/methods and combination of data sources/methods to recommend the best approach for conducting a statewide riparian inventory

describing the extent and characteristics of riparian vegetation

Build tools that can be used by multiple agencies (i.e. Veg Measure)

2. Outline project management and funding

Project Oversight

Ken Bierly

Kelly Moore

Project Implementation

Doug Terra (OWEB)

Mack Barrington (ODA)

Gary Lettman (ODF)

Jeremiah Knoche (OSU-NASA intern)

Steve Mrazik (DEQ)

Janet Ohmann (PNW Research Station)

Sharon Clarke (OSU)

Vicente Monleon (FIA)

Kevin Birch (ODF)
Paul Measeles (ODA)

Project Collaboration

Jon Hall (USF&W)
Elaine Blok (USF&W)
Roger Borine (NRCS)

Technical Advisors

List of people to be kept informed of project results
Bioscience discussion list
Develop collaborations to aid a statewide riparian assessment

3. What Sample Design will be used?

- Samples selected throughout basin with 2-tiered level of field data collection
 - Definitely not in a riparian area determined from existing maps
 - Could be in riparian area-need field visit for confirmation
 - Not in riparian area-minimal attributes collected
 - In riparian area-full suite of variables collected
- Question what is done in an area that may be classified as riparian (e.g. hydric soils, but it is currently in agriculture- therefore it is in the riparian zone, but it does not have riparian veg.
- Samples selected from a predefined riparian zone
How would this be defined? Fixed or variable width, what width, geomorphic
- Sample selected from a stream layer
Could relate to EMAP, and ODF&W sites so ancillary information data collection is minimal
Issue-what stream layer to use, extent of the drainage network

4. What plot design will be used?

- Riparian FIA
- Vincente
Issue time frame

5. What is the spatial extent?

Width of riparian area-fixed width, defined by geomorphology, variable width based on channel type, and drainage area.
Population of interest-lands adjacent to all streams, perennial. Intermittent, fish-bearing (how defined) in reality 1:100k, 1:24k, 1:24k+

Related question: What is the sample design?

How does this factor into aerial photo analysis and also GNN will be able to identify a riparian zone by the association of field plots to the pixels

6. What are the necessary and obtainable attributes?

- meet content standards
- meet agency needs
- relate to existing classifications

7. What ancillary information is needed (mapped, field-derived, acquired for another project)?

- Locational information (GPS)
- Geomorphic surface-floodplain, terrace, fan etc.
- Drainage area, stream size
- Channel, valley form
- Channel characteristics
- Soils
- Use of existing data-DEM's, DOQ's, ODF&W basin-level habitat surveys and OPS&W probability design habitat surveys, EMAP surveys.
- Environmental for GNN-have for Coast Range, need to acquire for other basins

8. Where will the data be stored and how will it be accessed

OGDC-storage costs

Need referencing system for aerial photos-how will this be done

9. Selection of Pilot Basins

selected to reflect range of land use, landscape characteristics, and ownership size/cost

Opportunities for collaboration

What information needs to be collected in each basins-does the exact same data needed for selected basins?

Potential Basins-

Size, pros, and cons, opportunities for collaboration, land use, ownership

Basin	Size	Land Use	Ownership	Topography	Collaboration	Pros	Cons
Yaquina	160 mi ²				ODF		
Yamhill	770 mi ²						
Middle Deschutes	1000 mi ²						
John Day					FIA, EPA, NOAA		
Williamson							

10. Best use of intern

merged product
GNN
AI

10 week training at NASA this summer-should have some questions in mind before he goes.

11. Identify products

- Merged Landsat-ETM with spot or IRS-C
- Georectified aerial photos
- Plot design
- Plots
- Accuracy assessment of each
- Recommended approach

12. Costs/Budget (?????)

\$50,000 digital aerial imagery

\$40,000 refinement VegMeasure software

\$60,000 plot studies (Collaborate with FIA?-John Day)

\$200,000 fine-scale satellite imagery

IRS-C

Merged product

GNN

Accuracy Assessment

Project Management

Opportunities for collaboration/funding

Report writing

Data storage and access

\$225-250 M to buy the imagery, take the field plots, and do the analysis

Overhead?

13. Who will do what by when (project flow)

- ODF imagery comparison
- Sample design
- Plot design
- Acquire environmental data for GNN
- Gather Field data (summer)
- State Landsat acquisition
- IRS-C data
- Generate Merged Product (Or purchase)
- Aerial photo acquisition (spring/summer)
- Manual photo interpretation (to substitute or augment field plots for GNN)
- Development of veg measure software
- GNN

- Accuracy assessment
- Generate report

Need an 2 page action plan for each selected basin, identify the specifics of what will be done, who we are collaborating with, and cost to OWEB.