PLANTING DESIGN FOR SHORELINES AND STREAMBANKS

March 11, 2014
OUTLINE [ for today ]

1. Goals
2. Studies
3. How to design for shorelines
   - Site Analysis
   - Programming
   - Visual Preferences
   - Design
4. Conclusions
GOALS

[DEQ]

Increase habitat

Prevent erosion

Provide ecosystem services
GOALS [ homeowner ]

Functions well for use (programming)

Fits homeowner aesthetics
GOALS [ homeowner ]

Needs to be culturally sustainable or...
Paul Robbins, University of Arizona, 2007 Study
-neighbors use of lawn matters, despite awareness of environmental issues

Joan Nassauer University of Michigan, 2009 Study “What will the Neighbors Think? 
-neighborhood aesthetics strongly sway your own

**The Flip Side:** You can also lead environmental change by interpreting your landscape
Joan Nassauer, University of Michigan: show evidence of human management
BALANCE [ is there a happy medium? ]

Mix of both open and vegetated: finding the right ratio
HOW? [ the 3 legged stool ]

1. Site Analysis:
   - understanding what is there

2. Programming:
   - what does client want to do or see there?

3. Your Design Skills:
   - ability to create functional, beautiful, ecologically sensitive design
SITE ANALYSIS [ what do you see? ]

-understanding what is there (soils, aspect, sun/shade, topography, hydrology, views, issues and opportunities you see)

-reading clues in the landscape

-understanding the ecosystem type and what belongs there
  - plant suites and associations
  - generalists
  - be careful with non-native plants
PROGRAMMING [ fine tuned approach ]

View access: degree of filtering or constriction acceptable
PROGRAMMING [water access-fine tuned approach]
PROGRAMMING [ fine tuned approach ]

Partial access—how much? Let specific views and programming inform size.
VISUAL PREFERENCES [understanding your client]

Show them images and watch them closely.
VISUAL PREFERENCES [ neat to loose ]

Vegetated and stable, but not native. Appropriate for some.
VISUAL PREFERENCES [ neat to loose ]

Vegetated with natives (or native cultivars), but looks neat.
VISUAL PREFERENCES [ neat to loose ]

Vegetated with natives, with a little more mixed plantings.
VISUAL PREFERENCES [ neat to loose ]

Even looser...
VISUAL PREFERENCES
[ neat to loose ]

Loose
VISUAL PREFERENCES [ height matters ]
DESIGN [ palette of natives ]

Know your plants!
- ecosystem niche (where most successful)
- habitat
Know your plants!
- benefits
- liabilities
DESIGN [ texture ]
DESIGN [ repeating patterns ]
CONCLUSIONS [ sensitive design ]