• Review purpose and goals of working group

**Purpose of Group:**
Monitor or coordinate monitoring (changes) in:
- Social understanding/perspectives
- Economic impacts (added)
- Treatment effects
- Landscape components and patterns

**Goals and Objectives:**
- Develop key monitoring questions and ways to answer them
- Collect and share information on the social, treatment effects and landscape monitoring in time and space
- Recommend any needed changes to ongoing efforts by the ODRC

• Discussion of monitoring spreadsheet: This discussion was wrapped into the monitoring questions, more or less, after it was determined that there is a lack of monitoring data from past treatments.

Notes about the spreadsheet that emerged include:
- Who is in charge of filling it in? USFS staff lead like Armand?
- Spreadsheet elements: site ID, treatment, date done, habitat type, cost, planned future treatments, lessons learned post-treatment, pre and post-treatment photos
- Identify data gaps and ways to address

• Revisit and flesh out monitoring questions and implementation strategies (See below)

• Identify any funding needs for this group’s work
  - After discussion, things identified include: flights for photos, monitoring tools, monitoring event organizing, long-term scientific research, social scientist/survey implementation
  - Jeff will add to funding needs spreadsheet

• Identify next steps and timeline for group’s work
  - Photo point monitoring
    - Develop list of photo points for monitoring
    - Develop photo point protocol
  - Treatments spreadsheet
    - Develop (as above) and add existing information
  - Secure monitoring funding
    - Seek funding for “bioblitz” type event
    - Develop list of needed monitoring tools and seek funding
  - Work with education and outreach committees to determine what questions they would like to have answered through any user or visitor surveys

• Next meeting/meeting schedule: Get together during next full meeting on February 15
**Redefined Monitoring Questions:**

a. **Socio-Economic –**  
*Desired outcomes: Understand how and if the ODRC’s education and outreach efforts are having desired impacts, and how the ODRC’s work is affecting the local economy.*  
i. Are education and outreach efforts working?  
   1. How would this be determined? Ask “Have you heard of...?” “How did you hear about...?”  
   2. Ask education and outreach work groups what they would want to learn.  
   3. This question would be explored through a survey or poll. Web-based or in person? Consider using field rangers for implementation.  
ii. What are public perceptions/knowledge of dunes work?  
   1. Consider different goals and outcomes of asking local communities versus visitors. How would questions be different considering these different groups?  
   2. How would the answers to this change our work? Would it help inform our education efforts?  
   3. This question would be explored through a survey or poll. Web-based or in person? Consider using field rangers for implementation.  
iii. What are the economic impacts of dunes restoration? Including tourism, visitation, and restoration-related jobs.  
   1. This question would be explored through research and compilation of existing data.  
   2. Consider putting together a survey using the Oregon Coast Visitors Association report on marine reserves

b. **Treatment—**  
*Desired outcomes: Develop best practices for site-specific treatments based on monitoring of use of various treatments, and determine if the dunes restoration goal of restoring site-specific conditions and processes is being achieved.*  
i. Questions:  
   1. How much and what are we doing out there?  
      a. Keep data of all treatments so can look back on, learn from  
      b. See info on spreadsheet in agenda notes  
   2. How effective was a specific treatment in reaching the goal?  
      a. What are the native and/or invasive plant response?  
   3. How did treatment affect or impact wildlife use?  
      a. Use/compile existing monitoring info on plovers and martens  
      b. Consider doing tiger beetle monitoring – good way to engage volunteers, and not much info on these critters  
   4. What treatments are most effective to remove invasives/increase open sand/increase native species?  
      a. Look at past treatment results and make notes in spreadsheet
ii. Methods:

1. Transects or plots –
   a. Prioritize where and how many of these to do, considering types of treatments, diversity of locations, etc.
   b. Utilize volunteers at big event to do? (Bio-blitz type event, utilize CWMA partners, public)
   c. Develop protocol for doing this type of monitoring

2. Photo points

3. Pre- and post-work party descriptions and photos
   a. Develop training/protocol for collection for volunteer work party leaders

   c. Landscape—

*Desired outcomes:* Understand how the landscape is changing over time, and if the dunes restoration goals of preserving the best and restoring landscape-scale natural processes are being achieved.

i. Questions:

1. How, and how fast, is the landscape changing without any treatments?
   a. Consider documenting different ecosystem elements (open dunes, invasive communities, foredune, deflation plain, etc)
   b. Utilize work being done for EA that is looking at rate of change in 5 areas.

2. How is the landscape changing with treatments?
   a. Consider looking at the response of some specific species like sand verbena and plover
   b. Consider looking at where and to what extent we have stopped the march of grass in treated areas

3. How successful are our efforts for “Preserve the best” goal of ODRC?
   a. Could have volunteers adopting a “best” area for long-term monitoring

4. Are there any new invasives or other issues that develop at a landscape level over time?

ii. Methods:

1. Use existing (past) aerial photography and plan for future flights to get new aerial images

2. Vista photo points
   a. List best places to locate points
   b. Develop protocol for taking photos (direction, time of year, etc) and for file organization
   c. Utilize volunteers or staff in “adopt a vista” program

3. Utilize volunteers who “adopt” preserve-the-best locations
   a. Develop protocol for this monitoring effort