

NCRN I&M Meeting
16 September
ROCR 10 am – 3:00 pm

Purpose: To continue working together to develop and implement long-term monitoring plans that provide parks with information needed to preserve and enhance the region's most important natural resources.

Objectives:

1. Evaluate and finalize NCRN vital sign selection
2. Incorporate SAC input
3. Define next steps

Agenda:

10:00 - Welcome and Introductions

10:10 - Review Planning Process

11:00 - Review of Vital Signs and Monitoring Objectives

12:00 – Lunch

12:30 - Discussion

2:00 – Next Steps

2:30 – Close

Handouts:

1. Summary of Vital Signs Dropped – Table 3.3
2. Summary Table (based on Tables 3.4, 5.1, 5.2, and 5.3 from the draft Monitoring Plan)
3. Protocol Development Summaries (2-page summary for each vital sign)

Meeting Notes

Present: Mikaila Milton (IM), Sue Salmons (ROCR), Dan Sealy (CUE), Marian Norris (CUE), Shawn Carter (IM), Geoff Sanders (IM), Doug Curtis (CUE), Susan Rudy (NACE), Brent Steury (GWMP), Melissa Kangas (GWMP), Jim Sherald (CUE), Jeff

Runde (CUE), Giselle Mora (CUE), Becky Loncosky (CATO), Brian Carlstrom (PRWI), Jennifer Lee (PRWI), Scott Bates (CUE), and Diane Pavek (CUE).

Powerpoint Presentation

A power point presentation was given to summarize the I & M Planning process to date. The presentation highlighted the vital signs which were previously proposed but have been dropped from consideration (See Handout Table 3.3). In addition, each of the remaining 21 vital signs was presented along with its justification and monitoring objectives (See Handout Summary Table). Participants were asked to consider two items during the presentation. 1. Will the vital sign meet your needs? 2. Will each monitoring objective meet your needs?

Questions

- 1) It was asked whether there was funding available to monitor all proposed vital signs. Some of the vital signs are already being monitored, and will not require additional funding. Budgets for new monitoring protocols are not complete, so it is difficult to say exactly how much monitoring can be achieved with our current budget. We will receive information from the protocol developers regarding how much funding is required for several levels of monitoring, and we may have to choose at what level to implement. For some vital signs, we will have to decide if minimal monitoring is acceptable. At this point it is essential that we make our monitoring objectives as clear and concise as possible to make sure park needs are met and so that appropriate protocols can be developed. Also, if we run out of funds before all monitoring can be implemented, we would then have a wish list for future monitoring and start seeking other funding sources.
- 2) There was a suggestion to add a column to the Summary Table that would relay the relevance of each vital sign to park management. Such an example would be helpful for superintendents to understand the relationship between vital sign monitoring and park management. **Action:** Marcus will add the column.
- 3) What imagery is being purchased by I&M for remote sensing background information. **Action:** Shawn will send out an email to the parks describing what new imagery has been purchased.
- 4) A question came up about how IM will help parks meet their GPRA goals. Identifying vital signs is one GPRA goal. Another GPRA goal relates to implementing vital sign monitoring. In addition, most vital signs relate to some other GPRA goal. There was a suggestion to add a column to the Summary Table to link each vital sign with a GPRA goal. **Action:** Marcus will add the column.
- 5) There was a suggestion to send out the Protocol Development Summaries electronically. **Action.** Marcus will do this.

Discussion (with a focus on vital signs that were dropped or should be added).

Item 1. A question was raised about monitoring for the early detection of pest species. Right now our only vital sign dealing with this issue relates specifically to Gypsy Moths. This is a good vital sign and should not be removed, but we should consider adding to this. The moths are not the only pest species we should be concerned about. Sometimes, there are new pests including pathogens. Several other networks including Cumberland Piedmont and Appalachian Highland are also thinking about developing monitoring protocols for early detection of pest species. **Action:** I&M should add this vital sign and follow up by developing protocols.

Item 2. Should groundwater be reconsidered as a vital sign? This is an important resource which is currently not covered by the vital signs. Some information on groundwater level may be gathered by monitoring for rare species such as amphipods at seeps and springs, and stream baseflow during drought. Marian noted that monitoring groundwater is impractical at this point. Much more information is needed in order to establish an effective program. **Action:** None.

Item 3. Is the I&M Fish IBI going to be integrated with the DC Fish surveys? Marian has had a tough time getting information from DC. The contact for the sampling permit in ROCR is Nicolene Shulterbrandt of the DC Dept. of Health (202) 535-2194. They use EPA sampling methods during storm events for a stormwater release permit. The monitoring consists of some ambient chemical conditions and some fish monitoring. The actual work is contracted out to MD Env'tl. Services. Nicolene could not provide with Marian with any clarification of what the actual parameters monitored were nor where the data was available. She said it had to be reported to EPA for the permit so I should get the data from EPA. Marian noted that the parameters listed on the ROCR permit on file are no longer being monitored at the locations listed. There appears to be additional monitoring at Ft. Dupont and Oxon Run. The contact for the fish monitoring at NACE is supposedly John Seaman of the DC Dept. of Fisheries (202) 535-2273. Marian has never had him return any calls. There is no permit on file for NACE and Steve Syphax was unaware that DC was sampling.

Item 4. What happened to monitoring visitor impacts? While monitoring visitor impacts has not been dropped, we have not made any progress on this vital sign. Some of the other networks are simply monitoring the number of people visiting the parks. Other networks are also monitoring very specific issues (eg snowmobile use at Yellowstone). The main concern relating to visitor impacts in this region is related to social trails. Dr. Jeff Marion is starting a research project for POGO that will look at monitoring visitor impacts. Once it is completed, it could be used as a model for other parks. It was proposed to wait to see what comes out of his study. However Jim Sherald said that it wouldn't be necessary to wait, since he wasn't developing anything new. Visitor impacts will also likely be addressed by monitoring other vital signs such as RTE species, exotic species, etc. **Action:** We didn't come to any conclusions on how to proceed with this vital sign.

Item 5. While it was recognized that monitoring shoreline change along the tidal portions of the Potomac was important, a question came up about its monitoring along the non-tidal areas such as along the upper Potomac. Some aspects of shoreline change will be monitored through the Physical Habitat Index. In addition, some aspects of shoreline change can be monitored by landsat imagery. Dr. Phil Townsend is looking at this question and will help us determine what the costs would be of extending the question of shoreline change to non-tidal areas. It was also noted that NOAA may already be monitoring shoreline change. **Action.** IM will continue to work with Dr. Phil Townsend on this issue to determine if others are already monitoring shoreline change.

<Break – Lunch>

Discussion (Focus on existing vital signs and monitoring objectives – will they meet the park needs?).

Item 1. Vital Sign: Mercury. What about Mercury as a bio-accumulation issue? Bio-accumulation information will be gathered through the Mercury Vital sign by data mining from ongoing USGS and state monitoring efforts. **Action:** None

Item 2. Vital Sign: Water. Can Maryland Biological Stream Survey (MBSS) data be compared to ongoing water monitoring efforts in Virginia including the county agencies? This is difficult because of different monitoring standards and efforts. While quantitative comparison may be difficult, qualitative comparisons are possible. **Action:** None.

Item 3. Vital Sign: Exotic and Invasive Species. Early detection protocols are being developed by other networks (eg. Klamath) in coordination with USGS. NCRN will likely be able to adapt the protocols for local implementation. A short discussion also evaluated whether I&M should monitor the treatment effectiveness of the Exotic Plant Management Team efforts. The EPMT is currently not monitoring treatment effectiveness. It is true that there are some research aspects to this issue. For example, research is needed to evaluate how to best treat species x. Once treatment is applied, however, there is also a need to follow up and make sure the treatment really is successful. Right now, EPMT, follows up in some areas but not consistently. One of the problems is that EPMT is evaluated by how many acres are treated and not by how well they are treated. **Action 1:** Since there was no consensus on how to deal with monitoring treatments, I&M should bring this issue up with the BOD. **Action 2.** While monitoring treatment is not a vital sign, I&M should continue to encourage EPMT to monitor treatments.

Item 4. Should grasslands and wetlands (non-forested habitat) be included in the Forest Inventory Analysis? There was some concern that these other areas would not be included in sampling. **Action:** Mikaila will work with FIA to make sure that long-term trend information can be gathered for non-forested areas. This, however, will not include areas such as crops.

Item 5. Should wetland (shorebirds and waterfowl) birds be included in monitoring?

The current focus for grassland birds is on determining if the grassland habitats are of good quality. If they are, then monitoring protocols will be developed. If they are not, then monitoring protocols will likely not be needed. The focus is also on breeding populations. The wildlife working group had previously decided that the region has significant forest and grassland habitat. Wetland habitats, however, were few and represented a lower priority. The point was also raised that these areas have not been evaluated for their use as bird habitat, and that they may represent a resource at only a few parks and should therefore not be part of a regional monitoring program. It was also brought up that sometimes resources are so important to the region that they are worthy of monitoring despite the fact that they are only found in a few parks. **Action:** IM should consider having wetlands evaluated (like grasslands) to determine how important these habitats are for birds.

Item 6. Will the Amphibian Research Monitoring Initiative (ARMI) provide us with adequate trend information? The information will focus on proportion of area occupied. While the methodology does not provide a population trend per se, it does provide an index for population status with minimum effort. **Action.** None.

Item 7. Should other wildlife species be considered for monitoring (eg. mesocarnivores)? These were not considered as important as monitoring deer or amphibians. Small mammals were considered initially by the wildlife working group, but populations fluctuate and are difficult to monitor. Other species like bobcat, coyote, bear, are rare and difficult to monitor. **Action:** None.

Summary: The table summarizing vital signs will be revised to reflect links between vital signs, management, and GPRA goals. One new vital sign will be added for the early detection of pest species (including pathogens). The monitoring objective for Forest Health Monitoring was expanded to include non-forested areas. The importance of wetland habitat for birds should be evaluated for possible monitoring. Expanding the monitoring objective for exotic species to include monitoring of treatment effectiveness will be discussed with the BOD. Vital signs relating to visitor impacts will continue to be explored but no definitive action was identified.

Next Steps:

1. I&M is hosting a Protocol Development Workshop for all of its PIs working on protocols. The workshop will look at sampling design issues.
2. BOD meeting will review vital signs for approval.
3. Final draft of the monitoring plan is due to WASO by 15 December.
4. I&M will follow up on action items identified above.

