MONITORING REPORT REQUIREMENTS

Monitoring reports shall include at a minimum the following information to be deemed complete:

<u>Monitoring Reports:</u> The first monitoring report is due the year the mitigation planting occurs, unless planting occurs after April 15, in which case the first monitoring report will not be due until the end of the next year. For each monitoring report, vegetative monitoring shall be conducted between May 1 and September 30 for forested/scrub-shrub systems and between June 15 and September 30 for emergent systems. Site visits should preferably be during a period with normal precipitation and groundwater levels. The following information must be included with the monitoring report:

1. Overview/Background Data:

- a. Title page indicating the project name; monitoring year; any requested action (e.g., credit release, agency review); project identification (name, address, phone number, and email address); and preparer identification (name, address, phone number, and email address)
- Written description of the location, any identifiable landmarks of the Project, including information to locate the site perimeter(s), and coordinates of the mitigation site (expressed as latitude and longitude)
- c. Date(s) of site inspections
- d. A brief paragraph describing the purpose of the Mitigation Project, including the proposed mitigation acreage and type of aquatic resources approved as part of the mitigation plan. Include the dates the mitigation construction was started and the planting was completed.
- e. A brief narrative description of the Mitigation Project addressing its position in the landscape, adjacent waterbodies, and adjacent land use
- f. A short statement on whether the performance standards are being met
- g. A narrative description of existing site conditions and how the Mitigation Project has or has not achieved the goals, objectives and performance standards established for the project
- Yearly performance standards data in tabular and graphical format, as detailed in Exhibit
 C, comparing as-built, current, and previous years monitoring data. Monitoring reports shall include a discussion of any deviation from as-built or previous year's data
- Dates of any recent corrective or maintenance activities conducted since the previous report submission
- j. Specific recommendations for any additional corrective or remedial actions



- k. Estimate the percent of the Mitigation Project that is establishing into wetland and the type of wetland system (ex: forested, scrub-shrub, emergent). If this differs from what was planned, show the boundaries of the actual wetland area/types on the plans or maps.
- I. Estimate the percent of the Mitigation Project buffer that is establishing into forested buffer. If this differs from what was planned, show the boundaries of the actual forested buffer area on the plans or maps.
- m. Discussion of growing season and how it was determined for this site
- Stream gage data or documentation of any significant flow or precipitation events, as recorded by the onsite stream gage(s) if present or documented through metrological data
- 2. Requirements: List the monitoring requirements and performance standards, as specified in the approved mitigation plan, and/or special conditions of the permit and evaluate whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success. Use the approved Performance Standards tables(s), as detailed in Exhibit C, for comparing the performance standards to the conditions and status of the developing mitigation site.
- 3. Summary data: Summary data should be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Take one set of photographs from established photographic points any time between May 1 and September 30 of each monitoring year (pictures should be taken at the same time of year when possible). Photo location points should be identified on the appropriate maps and labeled with the direction in which the photo was taken. Submitted photos should be formatted to print on a standard 8.5 by 11-inch piece of paper, dated, and clearly labeled with the direction from which the photo was taken.
- 4. Maps and Plans: Maps should be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan. GPS coordinates should be shown on the plans for each photographic reference point and sample plot. In addition, the submitted maps and plans should clearly delineate the mitigation site perimeter(s), which will assist the project managers in locating the mitigation area(s) during subsequent site inspections. Each map or diagram should be formatted to print on a standard 8.5-in. by 11-inch piece of paper and include a legend and the location of any photos submitted for review. As-built plans should be included if they were not already submitted to the agencies.
- 5. Conclusions: A general statement shall be included that describes the conditions of the compensatory mitigation project. If performance standards are not being met, a brief explanation of the difficulties and potential remedial actions proposed, including a timetable, must be provided. The agencies will ultimately determine if the mitigation site is successful for a given monitoring period.



As-Built Report: The as-built report shall include comparisons of the design plan to the as-built plan, using the following report components:

- Plan view of the constructed/restored wetlands, streams, habitat features, and adjacent buffers with location of all permanent sampling stations, photo stations, monitoring wells, instream and stream bank structures, and all permanent cross-section and profile locations
- 2. Photographs of the completed mitigation taken from permanent photo stations. Photos from each station must be grouped with corresponding photos from previous monitoring reports
- 3. Longitudinal stream profiles taken from permanent locations, and inlaid with and compared to design profiles
- 4. Cross-sections taken at permanent locations and inlaid with and compared to design cross-sections
- 5. Pebble counts from each station that are grouped with corresponding pebble counts from previous monitoring reports
- 6. Summary stream geomorphologic data presented in a side by side analysis for the design, reference, and as-built channels
- 7. Planting composition, locations, phases, and densities
- 8. Stream gage locations
- 9. Site boundaries
- 10. As-built elevations

