Objectives and Test Questions for the Presentation by Shawn C. on “Anticipating the Unexpected in the Context of Dam Removal”

Objective #1 – Understand ways in which the design process can reduce risk.

Objective #2 – Learn about some proactive strategies to use for adaptive management.

Objective #3 – Understand the differences between routine maintenance, adaptive management and remediation.

Five test questions

1. What are the critical components of a transparent design process? (select all that apply)
   A. Context (goals and objectives).
   B. Feasibility (field-based site characterization).
   C. Alternatives (concept alternatives).
   D. Analysis (design alternatives).
   E. Refinement (design package).

   Answer: All of the above.

2. Which of the following statements is true? (select all that apply)
   A. Routine maintenance is anticipated and planned post-construction work.
   B. Routine maintenance is anticipated but not planned post-construction work.
   C. Routine maintenance is not anticipated and not planned post-construction work.
   D. Routine maintenance is not anticipated but planned for anyway.
   E. Routine maintenance should not be part of a mitigation plan.

   Answer: A

3. Which of the following statements about adaptive management are true? (select all that apply)
   A. Actions are the result of adjusting the constructed site condition to adapt to on the ground changes that diverge from expectation.
   B. Actions are not typically covered by an Operations and Maintenance Manual (OMM) developed within the design and permitting phase.
   C. On the ground adaptive management actions are often radically different from expectation.
   D. Adaptive management is an iterative exercise that typically occurs within a planned management cycle to allow for necessary adjustments in order to reach project goals.
   E. Adaptive management is only necessary post-construction.

   Answer: A, B, C and D

4. Which of the following circumstances could result in the need for remediation? (select all that apply)
   A. The design is not approved by the regulator.
B. Inadequate planning.
C. Inadequate construction.
D. Natural disaster.
E. Lack of land available for mitigation.

*Answer: B, C, and D*

5. Which of the following statements about remediation are false? (select all that apply)
   A. Remediation does not always mean new direct actions - unanticipated change can offer a path to achieve project goals and objectives.
   B. Remediation only occurs when contaminants are found on the site.
   C. Remediation actions [or inaction] are the result of evolving site conditions that were not anticipated or expected by the design documentation or the regulatory permits.
   D. Remediation must result in the mitigation site meeting all proposed original design criteria.
   E. Remediation only occurs if the site is a total failure.

*Answer: B, D and E*