NEH Part 631 Chapter 24, “Sediment Deposition”
Summary of Revisions and General Notes

1. Formatting
   - This draft meets formatting requirements for Handbooks as agreed to by the Directives Management (Management Services Divisions) and the Conservation Engineering Division (CED).
   - Part of the formatting requirements resulted in all the tables, graphs, photos, figures, or other illustrative diagrams to be labeled as Figures.
2. The 1983 version of Section 3 – “Sedimentation” had nine chapters and is being replaced by the following chapters:
   - 210–NEH–631, Chapter 21, “Sediment Sources”
   - 210–NEH–631, Chapter 22, “Sediment Properties”
   - 210–NEH–631, Chapter 23, “Sediment Transport”
   - 210–NEH–631, Chapter 24, “Sediment Deposition”
3. Chapter 24 contains the following chapters of Section 3–Sedimentation:
   - Chapter 5–Deposition of Sediment
   - Chapter 6–Sediment Sources, Yields, and Delivery Ratios
   - Chapter 7–Field Investigations and Surveys
   - Chapter 8–Sediment-Storage Design Criteria
4. 631.2400 Introduction
   - Formatting changes to section.
5. 631.2401 Sediment Deposits
   - Update topics and organizational changes to section.
   - The impacts and fundamentals of planning damage surveys were moved to section 631.2402.
   - Procedures for conducting damage flood plain surveys was moved to section 631.2403.
   - Sediment deposits in harbors and estuaries (p. 5-14) was shortened due to old dredging costs and poor image quality of example. Harbor and estuary surveys were mentioned in Subsection (4) Other Surveys.
6. 631.2402 Sediment Damage Surveys
   - Sedimentation surveys, erosion and sediment deposition in floodplains, swamping, and other damage impacts are discussed briefly in this section.
7. 631.2403 Procedures for Conducting Floodplain Damage Surveys
   - This section discusses detailed methods of planning and conducting flood plain damage surveys. Factors for quantifying floodplain surveys damages were quantified. GPS and LiDAR topics were added as tools to assess and measure damages.
8. 631.2404 Reservoir Sedimentation Surveys
   - Readers are directed to the Reservoir Sedimentation Survey Database (RESSED) for survey data collected by federal agencies and others that are available online. Methods of sediment surveys have been updated by introducing modern equipment, computer programs, online data and examples of survey boats and equipment setups. The range-cable equipment section was edited due to working with a metal cable, reel, line meter plus the agency doesn’t presently have this equipment. There’s also issues with the personnel to survey monuments, move the cable to each range, conduct the reservoir survey and keep notes. With modern fathometers and GPS equipment surveys are rapid without significant safety risks with a metal cable stretched across

a lake. Examples of various fathometers, ground penetrating radar and remotely operated hydrographic survey boats are introduced.

9. 631.2405 Reservoir Sedimentation Survey Methods
    - Examples of bottom samplers were added to the section. Form SCS-ENG-209, "Reservoir Capacity Computation Sheet–Range Method" was outdated and removed. Data are collected electronically and processed with AutoCAD or ArcMap.
10. 631.2406 Sediment-Storage Design Criteria
    - The SCS-ENG-309 has not been updated, but a clear copy of the form has been provided. U.S. Geological Survey was referenced for suspended-load records. The reader was directed to 210-NEH-631–Geology, Chapter 22 for some of the existing sediment yield models.
11. 631.2407 Sediment Deposition in a Reservoir
    - No significant changes.
12. 631.2408 Sediment Storage Requirements
    - No significant changes.
13. 631.2409 Form SCS-ENG-309, Reservoir Sedimentation Design Summary
    - Format and minor changes to section.
14. 631.2410 Computing and Modeling Sediment Yield
    - Sediment delivery models and sources of information were added to section.
15. 631.2411 References
    - References were added and updated.
16. 631.2412 Bibliography
17. 631.2413 Appendix A: Instructions for Compilation of Reservoir Sedimentation Data Summary, Form SCS-ENG-034
    - A detailed set of instructions for completing the SCS-ENG-034 is provided.
    - Metric conversion factors are provided.
18. 631.2414 Appendix B: Example of the Contour Method for completing a sediment survey.
    - A step-by-step example for completing a sediment survey using ArcMap is provided.
    - There are several ways, and a website is referenced.