WATER QUALITY STANDARDS ACADEMY
STUDENT MANUAL
TABLE OF CONTENTS

Page

INTRODUCTIONS AND STUDENT EXPECTATIONS

Module Overview....1
PowerPoint Slides
Handouts:
1. Course Instructors....2

OVERVIEW OF THE WATER QUALITY STANDARDS PROGRAM

Module Overview....1
PowerPoint Slides
Handouts:
1. EPA Organization Chart....2
2. History of the Clean Water Act....4
3. Water Quality Based Approach....5

HYPOTHETICAL STATE

Case Study Description....1
State of the Art Map

WATERS OF THE UNITED STATES

Module Overview....1
Handouts:
1. Definition....2
PowerPoint Slides

DESIGNATED USES

Module Overview....1
Summary....2
PowerPoint Slides
Handouts:
1. Points to Consider Checklist....3
2. State A - Use Classification....4
3. Tribe B - Use Classification....5
4. State C - Use Classification....6
5. State D - Use Classification....7
6. State E - Use Classification....9
Case Study Assignment 1

Page

WATER QUALITY STANDARDS ON TRIBAL LANDS

Module Overview....1
Summary....2
PowerPoint Slides
Handouts:
1. Indian Tribal Approvals for the Water Quality Standards Program....3

HUMAN HEALTH CRITERIA

Module Overview....1
PowerPoint Slides
Summary....3
Handouts:
1. Class Problem Group Assignments....4
2. Instructions for the Class Problem....5
3. Class Problems (Case Study Assignment 2)....7
3A. Class Problems Answers (*to be distributed*)....19

BACTERIA CRITERIA

Module Overview....1
PowerPoint Slides

AQUATIC LIFE CRITERIA

Module Overview....1
PowerPoint Slides
Summary....3
Handouts:
1. Flow Chart....4
2. Freshwater Criteria Statement Example....5
3. Sample Calculation....6
4. Example Graph of GMAVs....8
5. Site-Specific Flow Chart....9
6. Aquatic Life Exercise....10

NITROGEN AND PHOSPHORUS CRITERIA

Module Overview....1
PowerPoint Slides
Summary....3
Handouts:
1. Nutrient Coordinators....4

Page

BIOLOGICAL CRITERIA
Module Overview....1
PowerPoint Slides

ECONOMIC CONSIDERATIONS
Module Overview....1
Summary....2
PowerPoint Slides
Handouts:
1. Case Study Scenario....3
2. Case Study Summary....4
3. Case Study Worksheet....6
3A. Case Study Answer Sheet (*to be distributed*)....9
4. Municipal Affordability Screener for Mesa City (*to be distributed*)....12
5. Secondary Test Financial Management Indicators for Mesa City) (*to be distributed*)....13
6: Socioeconomic Information....14

ANTIDEGRADATION REQUIREMENTS
Module Overview....1
PowerPoint Slides

USE ATTAINABILITY ANALYSES
Module Overview....1
PowerPoint Slides

TOOLS FOR ACHIEVING WATER QUALITY STANDARDS
Module Overview....1
PowerPoint Slides

401 CERTIFICATION
Module Overview....1
PowerPoint Slides
Handouts:
1. Case Study Scenario (Assignment 3)....2

IMPLEMENTATION: NPDES PERMITS
PowerPoint Slides

ED_002551_00000326-00003

Page

MIXING ZONES

Module Overview....1
Summary....3
PowerPoint Slides
Handouts:
1. Case Study....4

WATER QUALITY STANDARDS SUBMITTAL AND REVIEW PROCESS

Module Overview....1
Summary....2
PowerPoint Slides
Handouts:
1. Certification....3

IMPLEMENTATION: MONITORING AND ASSESSMENT

PowerPoint Slides

IMPLEMENTATION: IMPAIRED WATERS LISTING AND TMDLs

Module Overview....1
PowerPoint Slides

WRAP-UP/FEEDBACK

Module Overview....1
PowerPoint Slides