

INTRODUCTION TO SECTION 401

THE FEDERAL CLEAN WATER ACT, STATE SURFACE WATER QUALITY
STANDARDS, AND THE STATE ROLE IN HYDROPOWER LICENSING



FEDERAL CLEAN WATER ACT

(33 U.S.C. §§1251-1387)

PURPOSE: "TO RESTORE AND MAINTAIN THE CHEMICAL, PHYSICAL, AND BIOLOGICAL INTEGRITY OF THE NATION'S WATERS"

- PERMITS REQUIRED FOR DISCHARGES OF POLLUTANTS TO WATER BODIES
- STATES TO ESTABLISH WATER QUALITY STANDARDS
- STATES TO MONITOR WATERBODIES
- STATES TO IDENTIFY IMPAIRED WATER BODIES AND IMPOSE RESTORATION REQUIREMENTS
- STATES TO CERTIFY WHETHER FEDERAL LICENSES MEET WATER QUALITY STANDARDS (SECTION 401)



WATER QUALITY STANDARDS

- WATER QUALITY STANDARDS ESTABLISH WATER QUALITY GOALS FOR EACH WATER BODY, DESIGNATE USES OF THE WATER BODY, AND SET CRITERIA NECESSARY TO PROTECT THE USES
- EACH STATE DEVELOPS ITS OWN WATER QUALITY STANDARDS BASED ON EPA REGULATIONS, WITH REGULAR EPA REVIEW AND APPROVAL
- MASSDEP'S MASSACHUSETTS SURFACE WATER QUALITY STANDARDS: 314 CMR 4.00
 - CLASSES OF WATERS
 - DESIGNATED USES
 - WATER QUALITY CRITERIA
 - ANTI-DEGRADATION



CLASSES AND USES

(314 CMR 4.05)

- MASSACHUSETTS SURFACE WATER QUALITY STANDARDS ESTABLISH CLASSES OF WATERS AND IDENTIFY DESIGNATED USES

EXAMPLE: CLASS A INLAND WATERS INCLUDE PUBLIC WATER SUPPLIES

EXAMPLE: CLASS B INLAND WATERS ARE DESIGNATED AS HABITAT FOR FISH, WILDLIFE, OTHER AQUATIC LIFE AND FOR PRIMARY AND SECONDARY CONTACT RECREATION. CLASS B WATERS ARE ALSO SUITABLE FOR IRRIGATION AND OTHER AGRICULTURAL USES AND FOR COMPATIBLE INDUSTRIAL COOLING AND PROCESS USES

- NUMERIC AND NARRATIVE CRITERIA PROTECT THE DESIGNATED USES



SURFACE WATER QUALITY CRITERIA

- STATE WATER QUALITY STANDARDS SPECIFY PARAMETERS FOR WATER QUALITY
- CRITERIA MAY BE NUMERIC OR NARRATIVE

EXAMPLES:

TEMPERATURE < 83 DEGREES IN WARM WATER FISHERIES (NUMERIC);

FREE FROM OIL AND GREASE (NARRATIVE)

- THESE STANDARDS ARE IMPLEMENTED IN CLEAN WATER ACT PROGRAMS TO PROTECT DESIGNATED USES AND RESTORE SURFACE WATER QUALITY
- DISCHARGE PERMITS APPLY THESE STANDARDS TO ESTABLISH WATER-QUALITY BASED EFFLUENT LIMITATIONS
- WATER QUALITY IS IMPAIRED WHEN APPLICABLE CRITERIA ARE NOT MET



DESIGNATED USES AND EXISTING USES

EXAMPLES OF DESIGNATED USES:

- AQUATIC LIFE IS A NATIVE, NATURALLY DIVERSE, COMMUNITY OF AQUATIC PLANTS AND ANIMALS, SPECIFICALLY INCLUDING FISH, WILDLIFE, AND THREATENED AND ENDANGERED SPECIES (314 CMR 4.02)
- AQUATIC LIFE USE INCLUDES HABITAT SUPPORTING REPRODUCTION, MIGRATION, GROWTH AND OTHER CRITICAL FUNCTIONS (314 CMR 4.05(3)(a), (b) and (4)(a), (b))
- RECREATION INCLUDES SWIMMING (PRIMARY CONTACT), BOATING AND FISHING (SECONDARY CONTACT RECREATION) (314 CMR 4.02)
- PUBLIC WATER SUPPLY (CLASS A)
- IRRIGATION AND OTHER AGRICULTURAL USES AND COMPATIBLE INDUSTRIAL COOLING AND PROCESS USES (CLASS B)

EXISTING USES ARE DESIGNATED USES AND ANY OTHER USES THAT DO NOT IMPAIR DESIGNATED USES ACTUALLY ATTAINED ON OR AFTER 11/28/1975



ANTIDEGRADATION PROVISIONS

- STATE WATER QUALITY STANDARDS CONTAIN ANTIDEGRADATION PROVISIONS TO ENSURE THAT THE QUALITY OF WATERS ARE PROTECTED AND MAINTAINED
- EXISTING USES AND THE LEVEL OF WATER QUALITY NECESSARY TO PROTECT THE EXISTING USES MUST BE MAINTAINED
- HIGH QUALITY WATERS WHICH EXCEED THE MINIMUM LEVELS NECESSARY TO SUPPORT AQUATIC LIFE, WILDLIFE, AND RECREATION MUST BE PROTECTED TO MAINTAIN THAT LEVEL UNLESS SPECIFICALLY AUTHORIZED
- SPECIAL PROTECTION IS EXTENDED TO OUTSTANDING RESOURCE WATERS (INCLUDING PUBLIC WATER SUPPLIES) AND SPECIAL RESOURCE WATERS



SECTION 401

- SECTION 401 OF THE FEDERAL CLEAN WATER ACT REQUIRES ANY APPLICANT FOR A FEDERAL LICENSE OR PERMIT WHICH MAY RESULT IN A DISCHARGE TO NAVIGABLE WATERS TO OBTAIN A CERTIFICATION FROM THE STATE DEMONSTRATING COMPLIANCE WITH THE ACT
- FEDERAL LICENSES OR PERMITS INCLUDE 404 DREDGE AND FILL PERMITS, NPDES PERMITS, AND FERC LICENSES
- A STATE'S 401 WATER QUALITY CERTIFICATION:
 - MUST CERTIFY COMPLIANCE WITH WATER QUALITY STANDARDS – CRITERIA AND USES
 - MAY INCLUDE CONDITIONS OR DENY IF STANDARDS ARE NOT MET
 - CONDITIONS MAY INCLUDE "ANY OTHER APPROPRIATE REQUIREMENT OF STATE LAW" (SECTION 401(D))
 - 401 CONDITIONS BECOME CONDITIONS OF THE FEDERAL LICENSE OR PERMIT



HOW THE WATER QUALITY STANDARDS APPLY TO FLOWS AFFECTED BY FERC HYDROPOWER LICENSES

- AS AN ENERGY PROJECT, HYDROELECTRIC POWER FACILITIES ARE LICENSED BY THE FEDERAL ENERGY REGULATORY COMMISSION (FERC)
- HYDROPOWER FACILITIES TYPICALLY AFFECT FLOWS, AND CERTAIN POLLUTANTS MAY ALSO BE A CONCERN
- A SUPREME COURT CASE (PUD NO. 1, 1994) SPECIFICALLY DECIDED THAT FLOWS COULD BE INCLUDED IN WATER QUALITY STANDARDS AND IN 401 CERTIFICATIONS, BECAUSE FLOW SUPPORTS DESIGNATED USES
- MASSDEP'S WATER QUALITY STANDARDS STATE THAT FLOWS SHALL BE MAINTAINED OR RESTORED TO PROTECT EXISTING AND DESIGNATED USES IN 401 CERTIFICATIONS OF FERC LICENSES 314 CMR 4.03(3)(B)



WHAT DOES A 401 CERTIFICATION OF A HYDROPOWER PROJECT INCLUDE?

- MASSDEP MUST FIND THAT THERE IS REASONABLE ASSURANCE THAT THE OPERATION OF THE FACILITY, AS CONDITIONED, WILL COMPLY WITH THE STATE WATER QUALITY STANDARDS, INCLUDING:
 - PROTECTION OF EXISTING AND DESIGNATED USES:
 - AQUATIC LIFE - FISH, WILDLIFE, PLANTS, RARE SPECIES HABITAT
 - RECREATION – SWIMMING, BOATING, FISHING
 - MEET APPLICABLE NUMERIC AND NARRATIVE CRITERIA
 - ADDRESS ANY-IMPAIRMENTS ASSOCIATED WITH THE OPERATION OF THE FACILITY
 - LONG-TERM MONITORING AND MITIGATION PLANS TO ENSURE PROJECT MEETS STANDARDS OVER THE TERM OF THE LICENSE



WHAT HAPPENS AFTER THE 401 WATER QUALITY CERTIFICATION IS ISSUED?

- THE 401 WATER QUALITY CERTIFICATION MAY BE APPEALED TO AN ADMINISTRATIVE HEARING AT MASSDEP
- THE FINAL DECISION BY MASSDEP'S COMMISSIONER MAY BE APPEALED TO COURT
- THE FERC LICENSE MAY ALSO BE APPEALED IN FEDERAL COURT (THE 401 WATER QUALITY CERTIFICATION IS ISSUED BEFORE THE FERC LICENSE)
- AFTER ANY APPEALS ARE RESOLVED, THE FERC LICENSE WITH 401 CONDITIONS GOVERN THE OPERATION OF THE HYDROPOWER FACILITY FOR THE TERM OF THE LICENSE.

