APA-MA AICP Exam Prep Course

Sustainability & Resilience

Presenter:
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March 30, 2026

Brooke House at Olmstead Village, Mattapan, Boston, MA
Image: MASS Design Group

About Me

Education

- Bachelor's Degree in Landscape Architecture – Penn State University
- Master's Degree in City Planning – Boston University

Professional Experience

- Planning Intern at Lakes Regional Planning Commission (2010)
- Architectural Designer at Cummings Properties (2012 – 2015)
- Project Planner at Nitsch Engineering (2015 – Present)

Areas of Interest

- Design and planning of Green Infrastructure
- Urban Stormwater Management and Flood Resilience Planning
- Land Use Planning and Real Estate Development
- Community Engagement & Public Outreach

Places

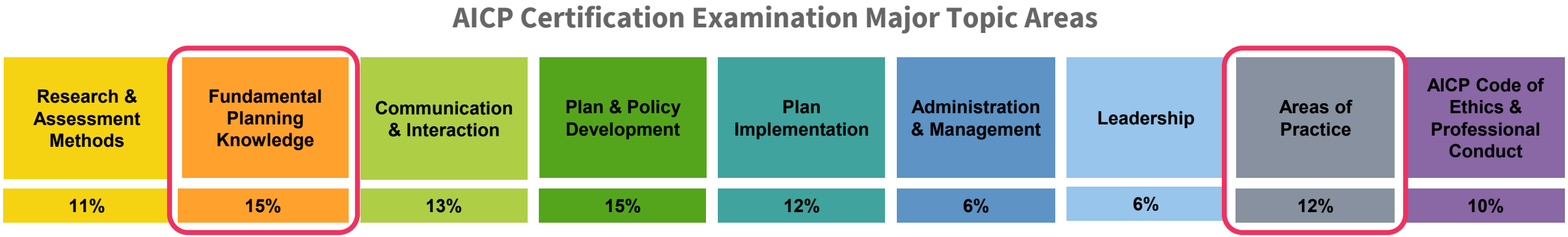
- Boston, MA | Malden, MA | Chelmsford, MA |

Agenda

- Concepts & APA Sustainability Principles
- Systems, equity, and life-cycle/adaptability
- Hazard mitigation & resiliency planning
- Environmental + implementation tools (NEPA/CWA/CAA, LID/green infrastructure, zoning)
- Two mini case studies + practice questions

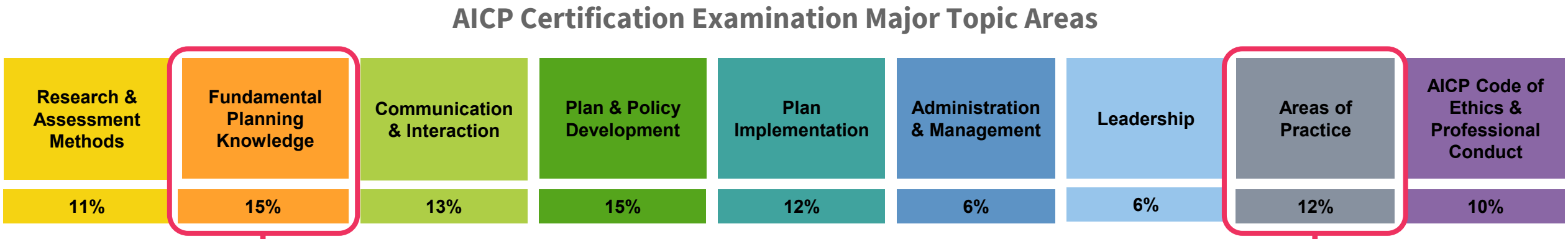
Why do these topics matter on the AICP Exam?

- Shows up in multiple exam areas:



- Expect both definition questions and scenario-based tradeoff questions
- Common test pattern: pick the ‘planner’ answer (systems, equity, feasibility, implementation)

How APA Incorporates Sustainability & Resilience



- Natural, social, and economic systems (demographics, ecology, water, health, climate, finance)
- Core planning values (equity, inclusion, public interest, transparency, sustainability, resiliency)

- Sustainability and resilience planning (six principles) & adaptability & life-cycle analysis
- Hazard mitigation and resiliency planning (risk assessment + hazards + preparedness & adaptation)

1

Sustainability & Resilience Concepts

Definitions & Concepts

Sustainability

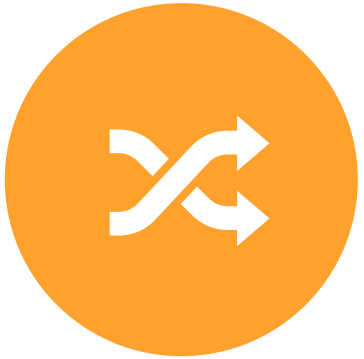
- Long-term capacity of natural & human systems
- Triple bottom line: environment + economy + equity
- Multi-generational perspective

Resilience

- Ability to absorb shocks, adapt, and recover
- Redundancy, flexibility
- Social, infrastructural, and ecological resilience

Six sustainability principles

Livable Built Environment

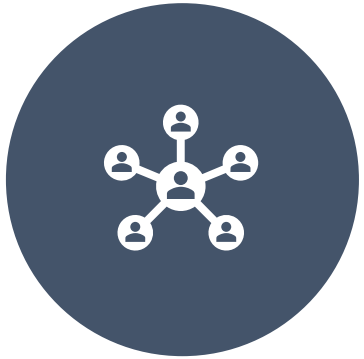


Interwoven Equity

Harmony with Nature

Resilient Economy

Healthy Community



Responsible Regionalism

Adaptability & life-cycle analysis (LCA):

- **Adaptability:** designs/policies that can change as conditions change (phased, modular, trigger-based)

- **Life-cycle analysis:** consider total costs/impacts over time (Capital Expenditure, Operational Expenditure, maintenance, replacement)

Choose options that account for long-term O&M, co-benefits, and avoided damages

Systems Thinking: Natural, Social, & Economic

Natural

- Watersheds
- Climate
- Ecology
- Ecosystem services

Social

- Demographics
- Public health
- housing stability
- Hubs and services

Economic

- Municipal finance
- Labor markets
- Supply chains
- Fiscal impact

Look for feedback loops and unintended consequences

What to look for in answer choices

Equity, diversity, inclusion, and social justice

Public interest, transparency, & engagement

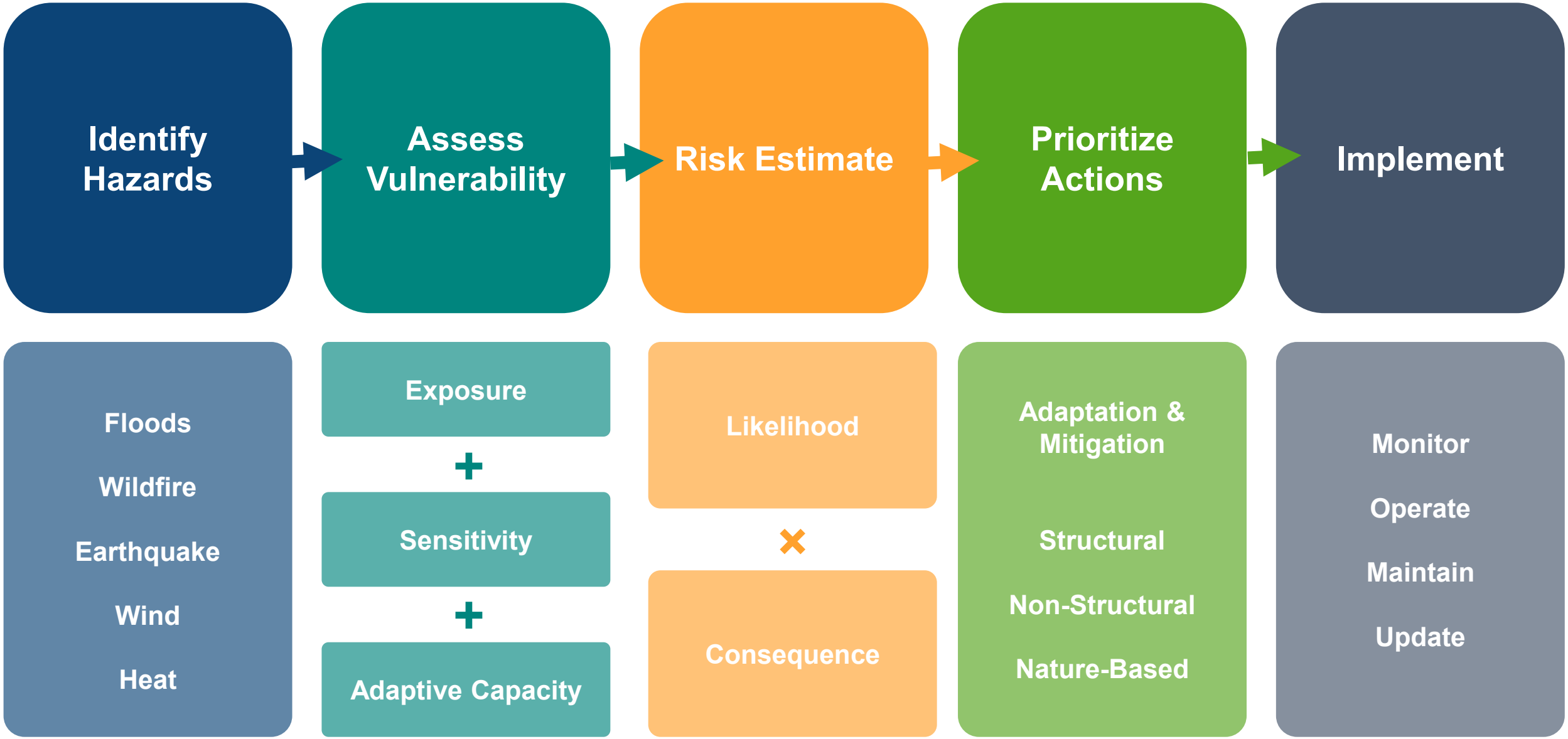
Health, safety, welfare, & police power

Integrated Sustainability & resiliency lens

2

Hazard Mitigation & Resilience Planning

Hazard Mitigation & Resilience Planning



Planning Tools for Flood Risk

Land Use

- Floodplain Overlays
- Requiring Freeboard
- Limiting Fill & Earth Moving
- Setbacks & Buffers

Capital Planning

- Critical Facilities Relocation / elevation
- Drain system upgrades
- Proactive floodproofing

Nature Based

- Expanded floodplain
- Wetland Replication
- Culvert Inventory/ Assessment and Hydraulics
- Living Shorelines

Managed Retreat

- Land Acquisition
- Relocation Assistance
- Easements

Match the tool to context and minimize harm to vulnerable populations

Planning Tools for Wildfire, Seismic, & Materials Risk

Wildfire

- Wildfire-focused land use controls such as
  - Landscaping
  - Density
  - Subdivision design
  - Evacuation planning

Seismic

- Critical Facility siting
- Retrofit policies
- Redundancy
- Earth-moving, foundations/footings

Hazardous Materials

- Hazardous Materials Siting & Buffers
- Emergency Management coordination
- Communicate Risk
- Brownfields Hazardous Materials

Risk Assessment Inputs

Quantitative

- Damage Estimates
- Critical Facility Impacts
- # of population impacted / displaced
- Benefit-cost framing

Qualitative

- Risk Matrices (Low, Med, High)
- Hot-spot maps
- Equity Impact Screening
- Capacity Assessment (staff, funding, policy)

Risk

Likelihood × **Consequence**

Qualitative inputs to Risk Assessment force test takers to make judgement calls on answers

Risk Assessment Inputs

Fail-Safe

Tries to prevent failure entirely

(i.e. levees, floodproofing

Safet-to-fail

Allows for controlled flooding
distributed systems
redundancies

The best answer often blends both, plus governance + maintenance

10 Minute Break!

3

Environmental Planning & Regulatory Frameworks

Environmental Regulatory Context

National Environmental Policy Act (NEPA)	Clean Air Act	Clean Water Act	Resource Conservation & Recovery Act (RCRA)	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	Environmental Justice
Categorical Exclusion Environmental Assessment Environmental Impact Statement	NAAQS SIPs	NPDES Wetlands (S. 404) MS4	Solid Waste Landfill Status	Hazardous materials & sites Liability	Executive Order 12898 NEPA Guidance

NEPA

- National Environmental Policy Act of 1969
- NEPA established a process to review any federal projects and policies that could impact environmental quality.
  - It is an evaluation and notification process – not a direct decision-making process
- NEPA created the Council on Environmental Quality (CEQ) to draft regulations for environmental review and publish an annual report on national environmental quality.

Applies to federal actions (projects, funding, permits) with potential environmental effects
Document types:
- **Categorical Exclusion (CE),**
- **Environmental Assessment (EA),**
- **Environmental Impact Statement (EIS)**

FONSI can conclude the EA pathway

NEPA is an evaluation & disclosure process, not the decision itself

NEPA

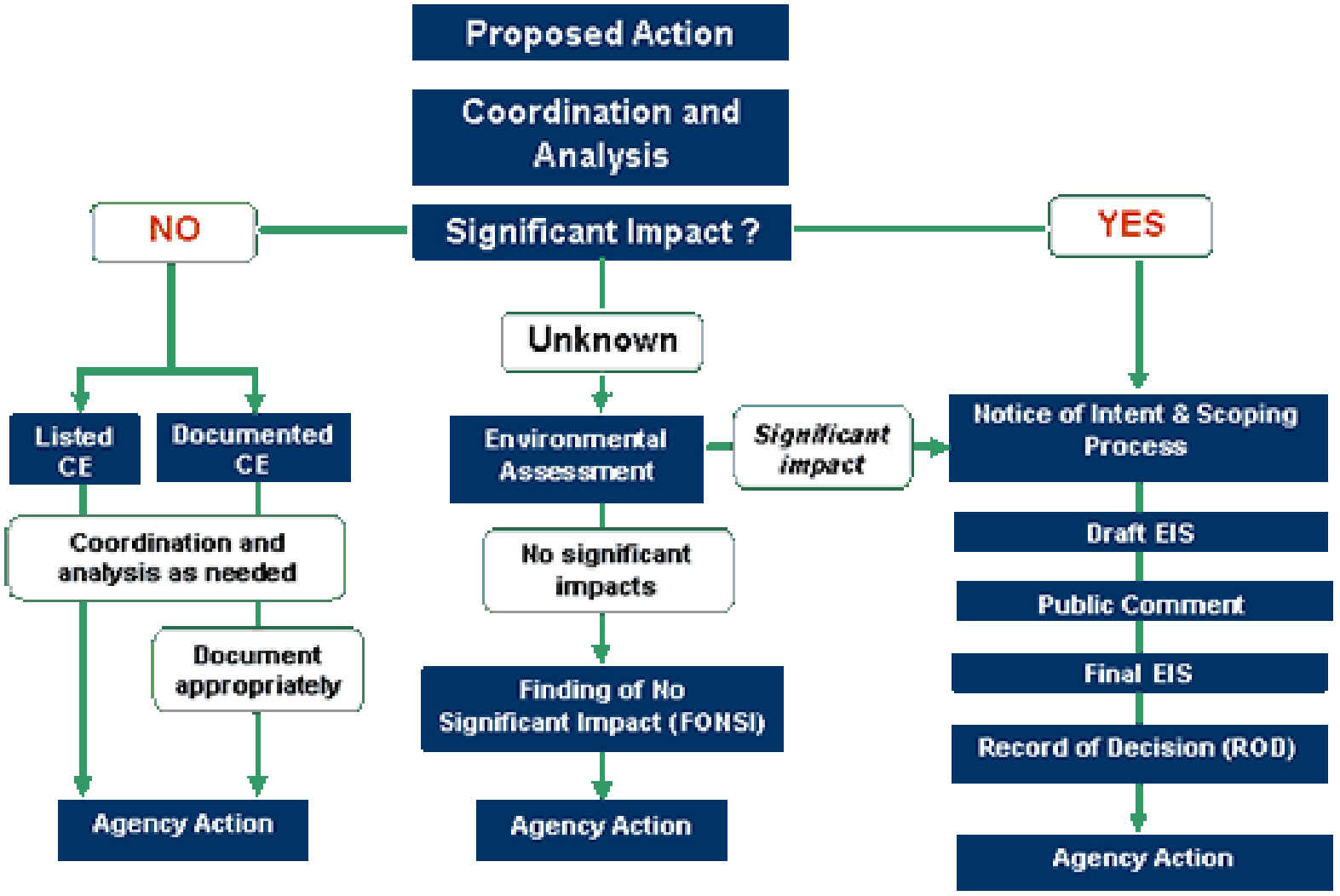
- NEPA requires review of all proposed federal projects, funding, permits, policies, and actions for “significant” environmental impacts. NEPA requires review of state and local government, as well as private sector, actions requiring federal approval or permitting

- The significance of an action is based on:
  - 1) the extent to which the action will cause adverse environmental effects in excess of those created by existing uses; and,
  - 2) the absolute quantitative adverse environmental effects of the action.

For the test, match the situation to CE / EA / EIS and know FONSI as the “EA concludes no significant impact” pathway

NEPA

- Type of Environmental Documents:
  - Categorical Exclusions (CE)
  - Environmental Assessments (EA)
    - Environmental Impact Statement (EIS)
    - Finding of No Significant Impact (FONSI)



(Source: Center for Environmental Excellence)

NEPA

- Elements of the Environmental Impact Statement (EIS):
  - Current conditions and the probable impact of the proposed action;
  - Any adverse environmental effects which cannot be avoided should the proposal be implemented;
  - Alternatives to the proposed action and their likely impacts;
  - The relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity;
  - Any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented;
  - Ways to minimize the negative impacts of the proposed action.

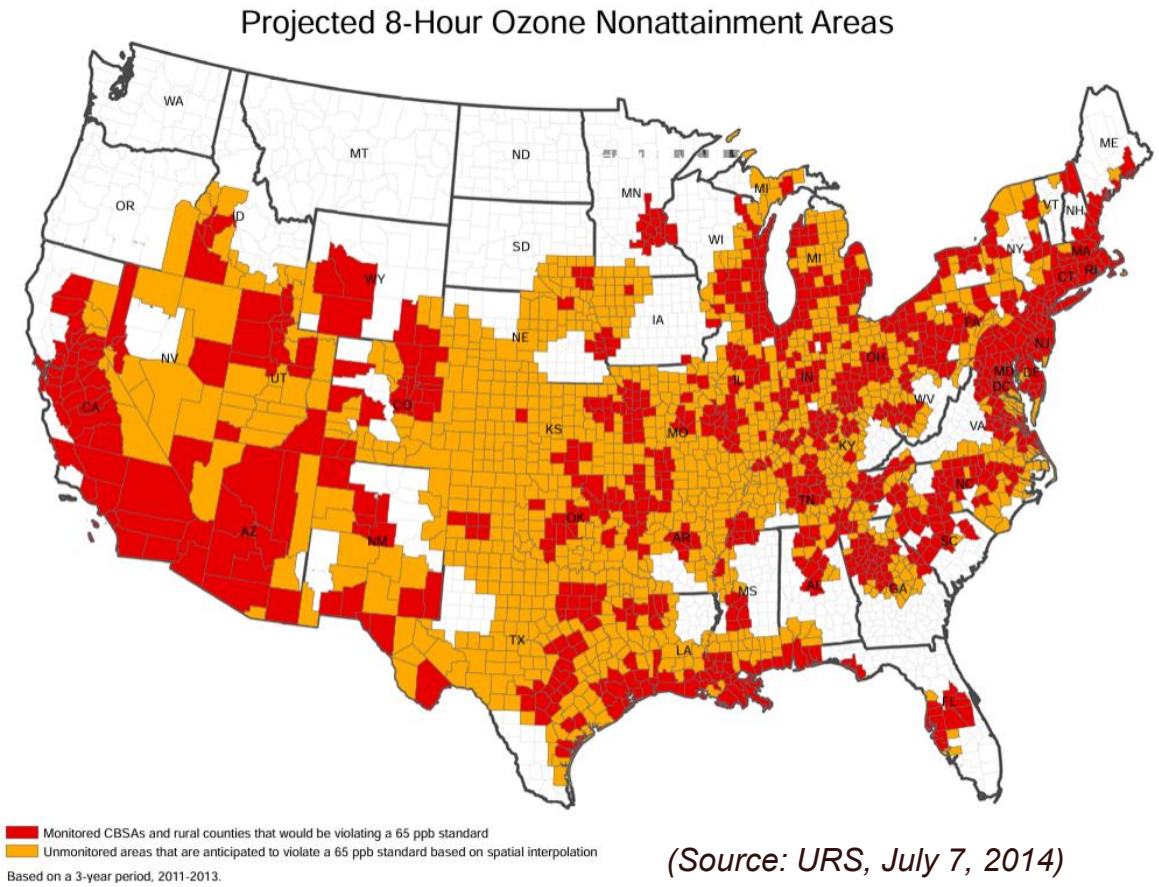
For EIS: Best answers will reference alternatives, unavoidable adverse effects, short-term vs long-term productivity, irreversible commitments, and ways to minimize negative impacts

Clean Air Act

- Clean Air Act – 1970, 1977, 1990
- Clean Air Act Amendments of 1990: The Nine Titles
  - **Title I.** **National Ambient Air Quality Standards (NAAQS)**
  - Title II. Mobile Sources
  - Title III. Hazardous Air Pollutants
  - Title IV. Acid Deposition (aka Acid Rain)
  - **Title V.** **Stationary Source Operating Permits**
  - Title VI. Stratospheric Ozone & Global Climate Protection
  - Title VII. Provisions Regarding Enforcement
  - Title VIII. Miscellaneous Provisions
  - Title IX. Clean Air Research

Clean Air Act – Title 1

- Title I. National Ambient Air Quality Standards (NAAQS)
  - NAAQA 6 Pollutants:
    - **Lead (Pb)**
    - **Carbon Monoxide (CO)**
    - **Nitrogen dioxide (NO2)**
    - **Sulfur dioxide (SO2)**
    - **Particulate matter (PM10 & PM2.5)**
    - **Ozone (O3)**
  - Primary standards are set to protect public health.
  - Secondary standards are set to protect vegetation and buildings.



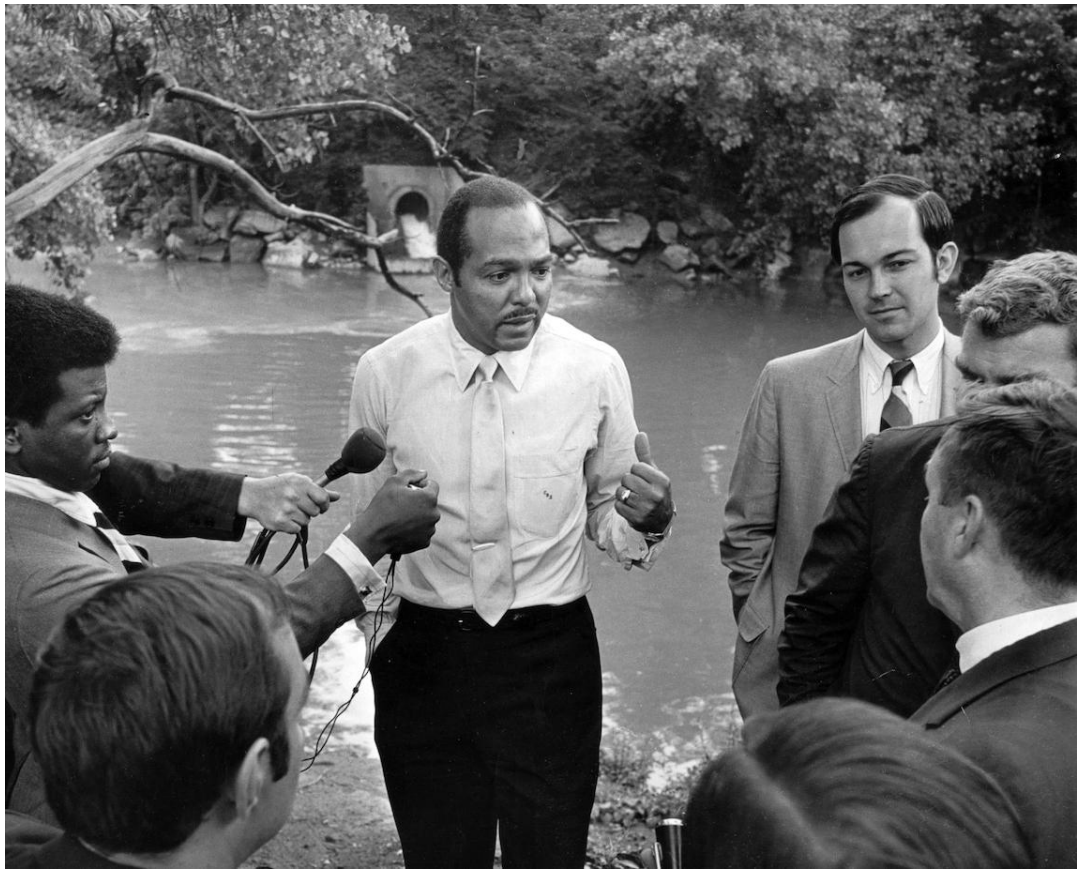
(Source: URS, July 7, 2014)

Clean Air Act

- Title V. Stationary Source Operating **Permits**
  - Requires all major sources (100 tons per year or more) of air pollution to obtain an operating permit. A Title V permit grants a source permission to operate. The permit includes all air pollution requirements that apply to the source, including emissions limits and monitoring, record keeping, and reporting requirements. It also requires that the source report its compliance status with respect to permit conditions to the permitting authority.
  - New Source Review (The NSR Program)
    - New major stationary sources of air pollution and operators of major stationary sources undergoing significant modifications are required by the Clean Air Act to obtain an air pollution permit before commencing construction.
    - Attainment areas - an area where air quality is acceptable - Prevention of significant air quality deterioration (PSD) permits
    - Nonattainment areas - an area where the national ambient air quality standards (NAAQS) are exceeded - Nonattainment NSR (NNSR) permits

Clean Water Act

- Clean Water Act
  - Water Pollution Control Act of 1948
    - Federal role limited to expertise and advice to states
  - Water Pollution Control Act of 1956
    - Research on interstate pollution control
    - Grants for wastewater treatment facilities
  - Clean Water Acts of 1972, 1977, & 1987
    - States develop and enforce water quality standards
    - National Pollution Discharge Elimination System (NPDES) permits
    - More emphasis on effluent quality than water quality
  - Safe Drinking Water Act of 1974 & 1986
    - National health-based standards for drinking water



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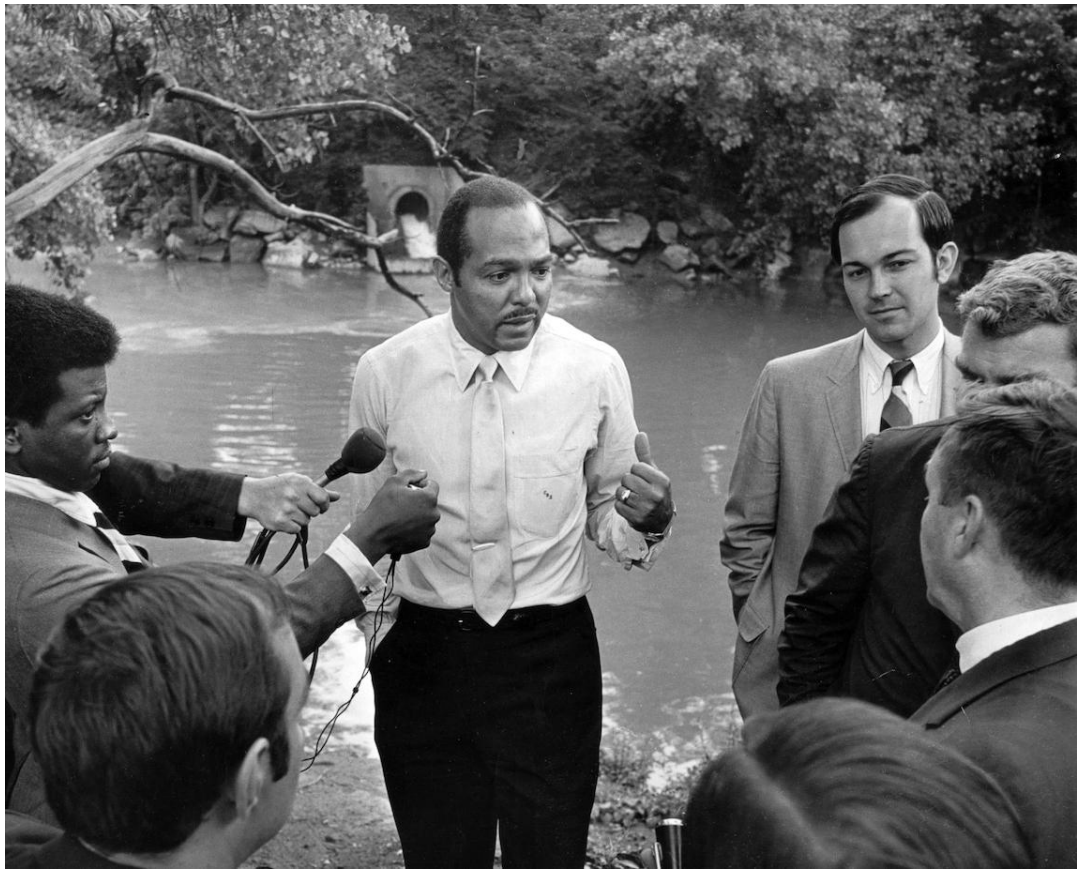


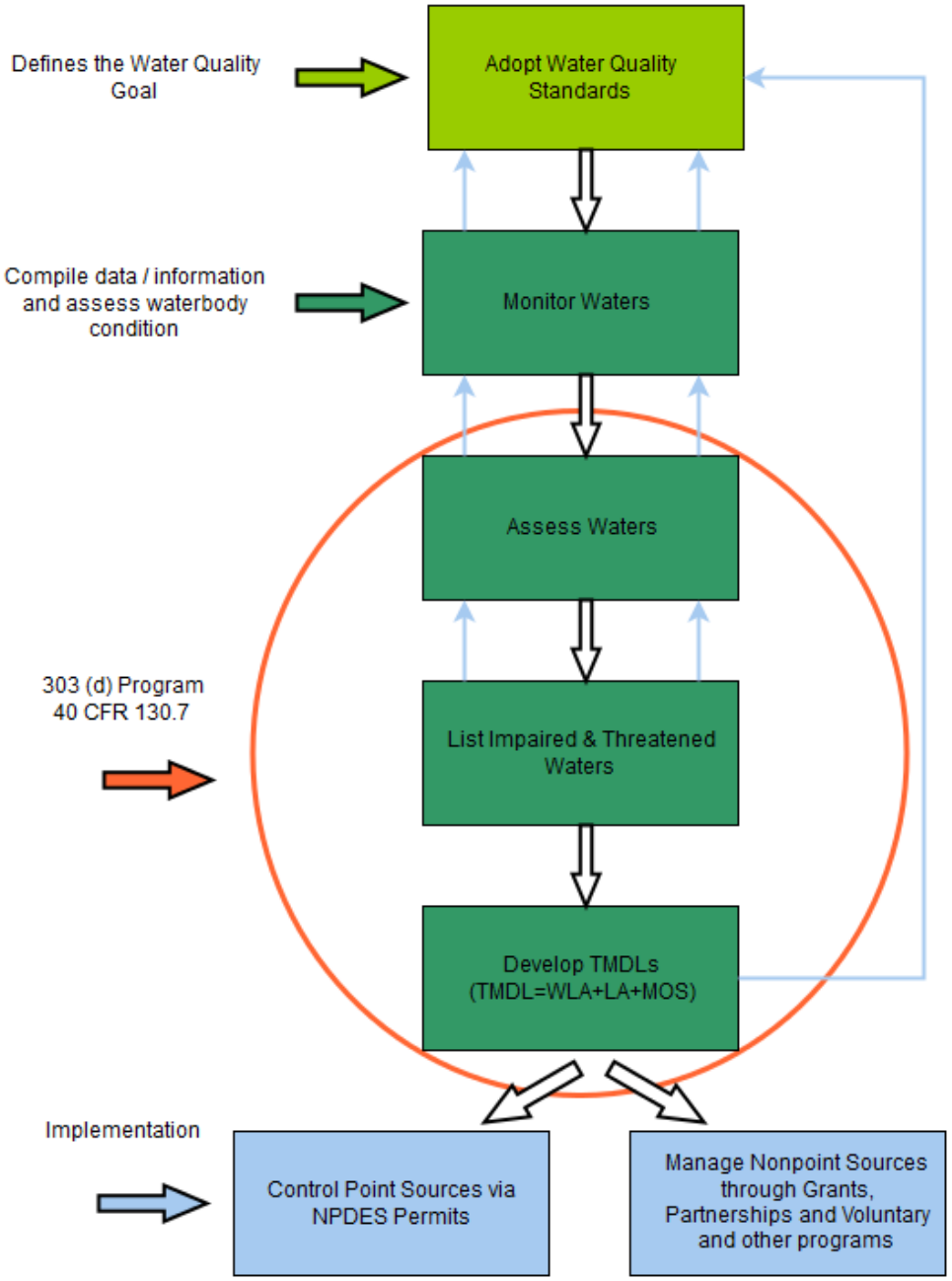
Mayor of Cleveland, OH – Carl Stokes

Clean Water Act

- At least 13 fires have been reported on the Cuyahoga River, the first occurring in 1868
- The largest river fire, in 1952, caused over $1 million in damage to boats, a bridge, and a riverfront office building.
- President Nixon, who generally supported environmental clean-up efforts, vetoed a bill passed by Congress to create national water quality standards because of the high price tag. Congress overrode his veto. That law was the Clean Water Act.

Water Quality

- Point source pollutants: Water or air pollutants discharged from an effluent pipe, smokestack, or tailpipe.
- Non-point sources of water pollution: Created from numerous and diverse land use and agricultural activities, such as urban stormwater runoff.



Water Quality

Clean Water Act Programs

1.	Section 201	Grants for construction of public sewage treatment plants.
2.	Section 208	State water quality standards and management plans, addressing the nondegradation of swimmable and drinkable waters and waters of "exceptional recreational or ecological significance," the identification and use of best management practices for the control of point and nonpoint pollution sources.
3.	Section 303(d)	State Total Maximum Daily Load process for prioritizing and implementing clean-up of impaired waterways. The state compiles a list of impaired waters by priority for clean-up, known as the 303(d) list.
4.	Section 305(b)	*Biennial Environmental Protection Agency Report* to Congress on the Nation's Water Quality, based on state-level data.
5.	Section 319	State plans and programs and federal loans and grants for the control of nonpoint source pollution and to publish reports.
6.	Section 402	National Pollutant Discharge Elimination System permit system for point and nonpoint sources of water pollution, including stormwater management permits and permits for confined animal feeding operations. This includes the monitoring of urban stormwater discharges into regulated streams.
7.	Section 403	Pretreatment of industrial sewage before discharge into municipal sewage treatment plants.
8.	Section 404	Wetlands permitting system for the draining and filling of wetlands (see Chapter 10).
9.	Section 503	Sewage sludge land application and disposal regulations.
10.	Section 604(b)	State water quality planning and assessment grants. Can be used for monitoring water quality and setting water quality standards.

Water Quality

- Section 303 (d): Total Maximum Daily Loads Standards (TMDLs)

TMDL = WLA + LA + MOS

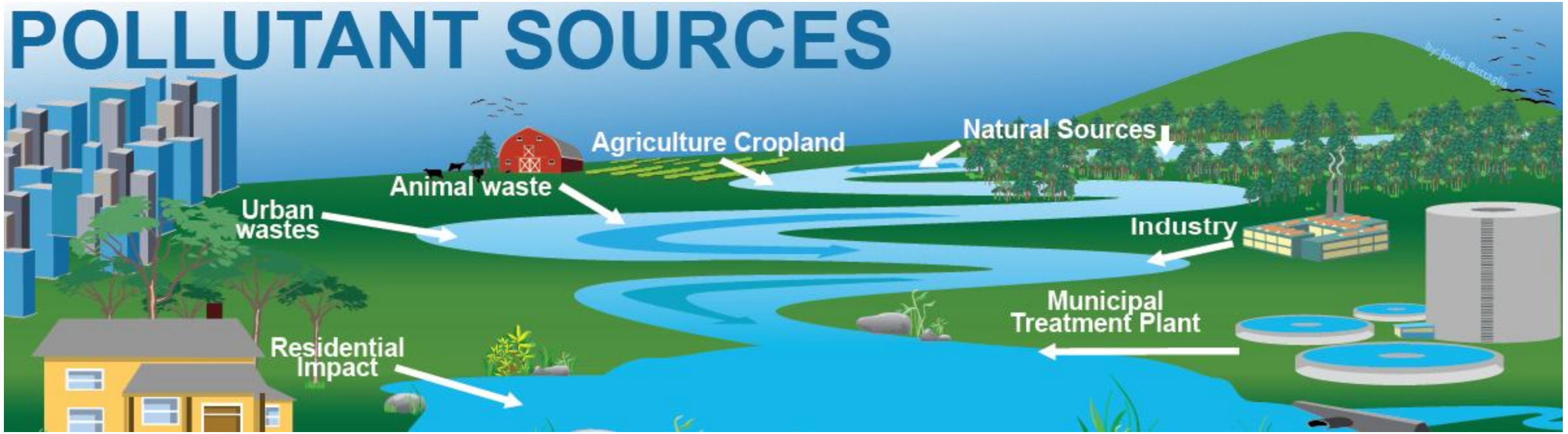
WLA = daily load of pollutants permitting as point source discharges

LA = amount of pollution that nonpoint sources can discharge

WLA = Waste Load Allocation

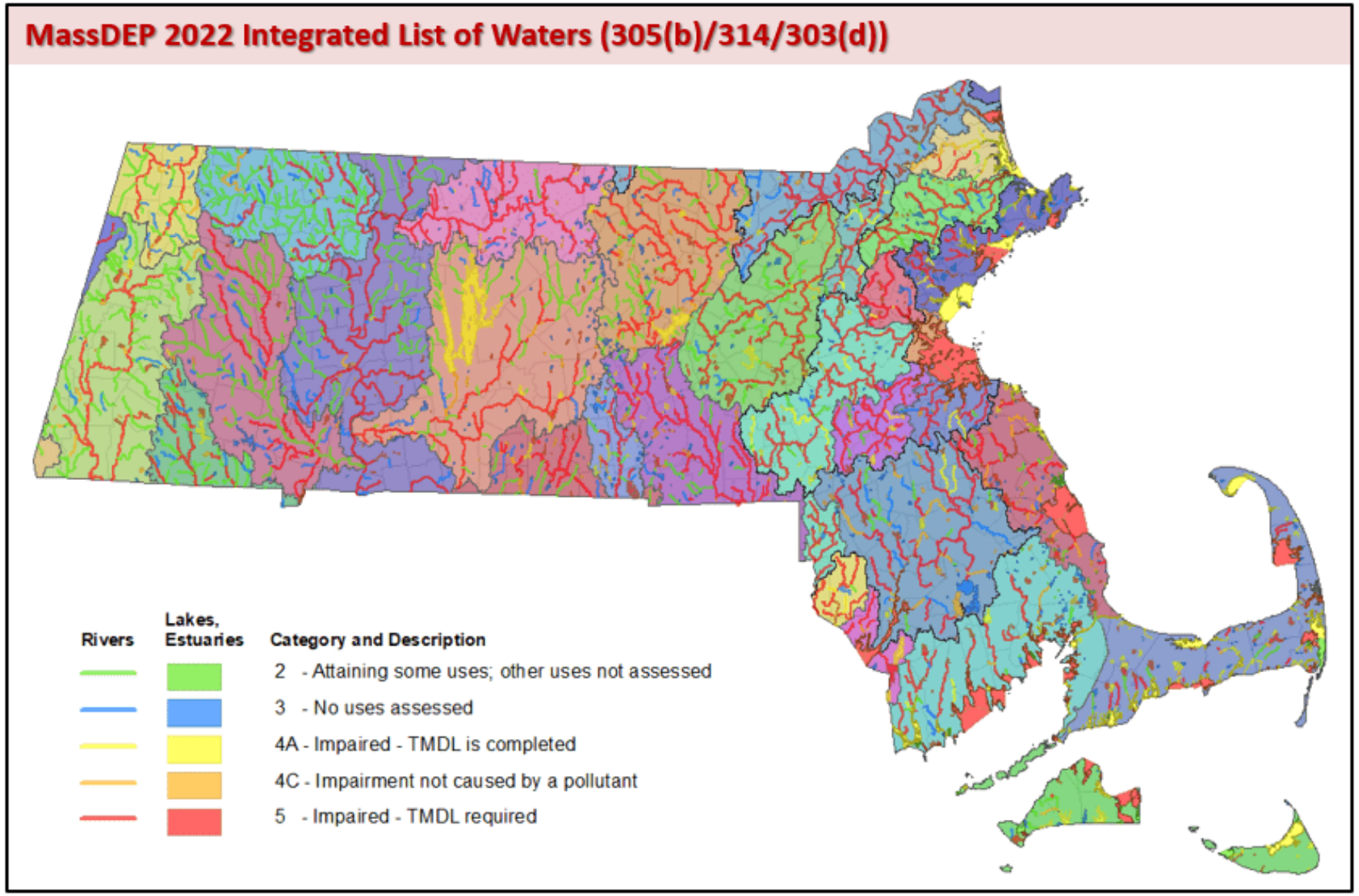
LA = Load Allocation

MOS (Margin of Safety)



Water Quality

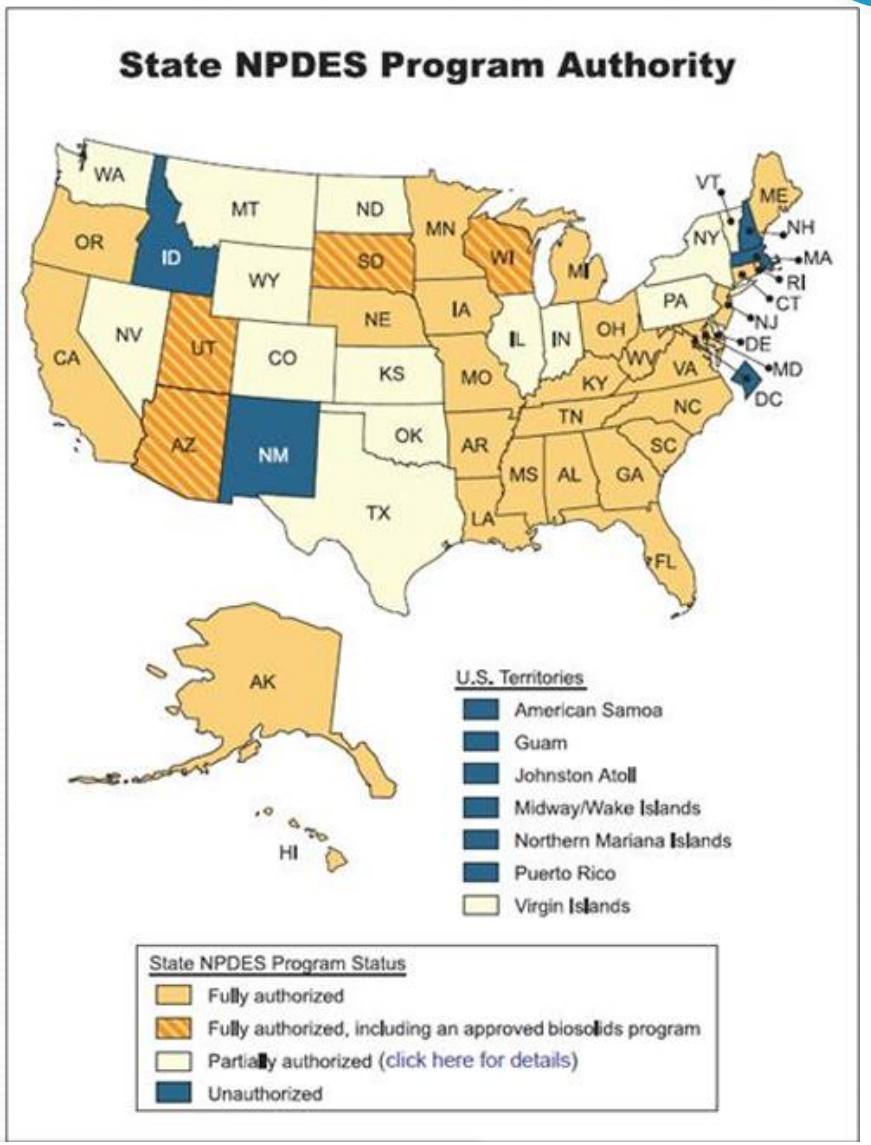
[Integrated Lists of Waters & Related Reports | Mass.gov]



MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection

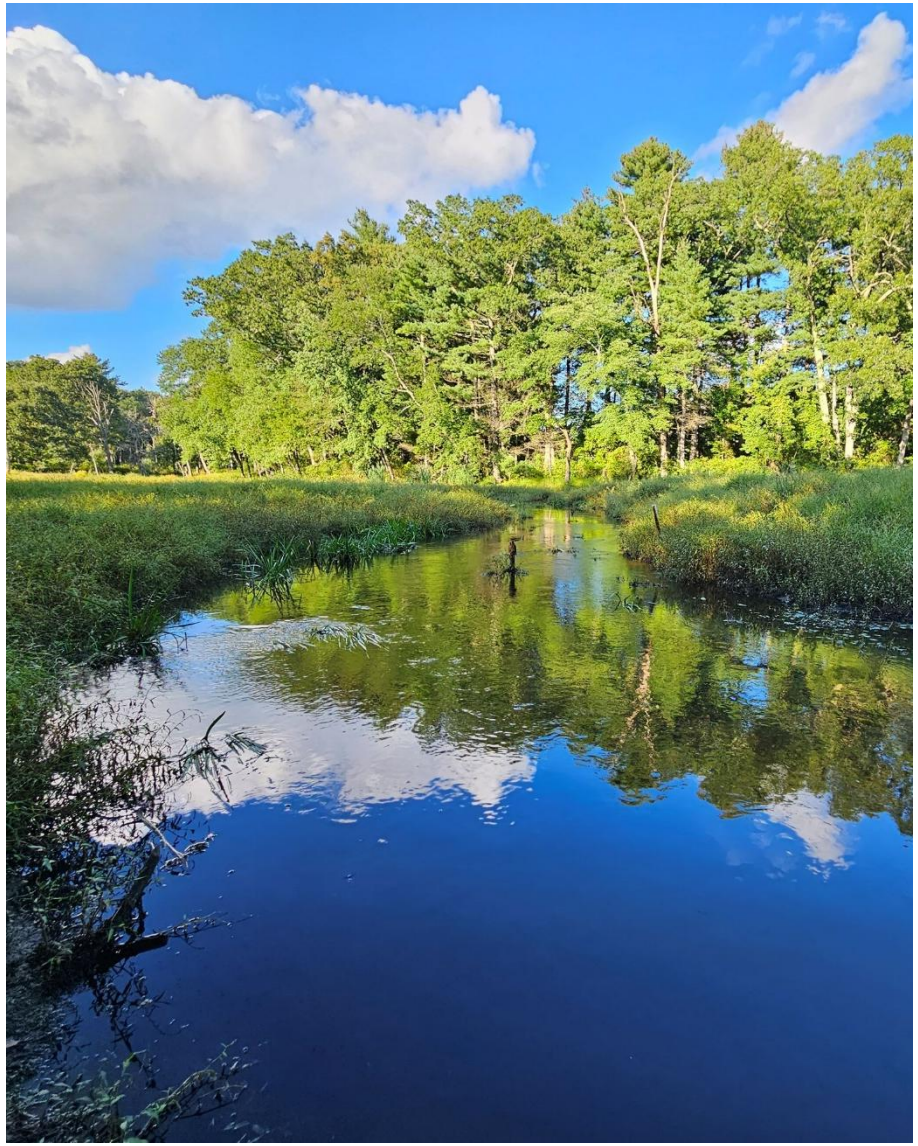
Water Quality

- Section 402: National Pollution Discharge Elimination System (NPDES)
  - NPDES Permits are obtained by entities discharging pollutants into surface water (rivers and bays) including municipal wastewater treatment plants and industrial facilities.
  - Permit requirements:
    - Public education and outreach on stormwater impacts
    - Public involvement/participation
    - Illicit discharge detection and elimination
    - Construction site stormwater runoff control
    - Post-construction stormwater management in new development and redevelopment (Low Impact Design –LID)
    - Pollution prevention/good housekeeping for municipal operations.



Water Quality

- Section 404: Wetlands Permitting
  - Regulate the discharge of dredged or fill material into wetlands
  - Jointly administered by the U.S. Army Corps of Engineers and the Environmental Protection Agency
  - No discharge of dredged or fill material may be permitted if:
    1. a practicable alternative exists or
    2. the nation's waters would be significantly degraded
  - Permit review and issuance follows a sequence process
    - **Avoid** impacts,
    - **Minimize** impacts
    - **Mitigate** for unavoidable impacts to the aquatic environment
  - General permits are issued for specific classes of activities.
  - Projects not covered by a general permit require individual review by the Corps and an individual permit.

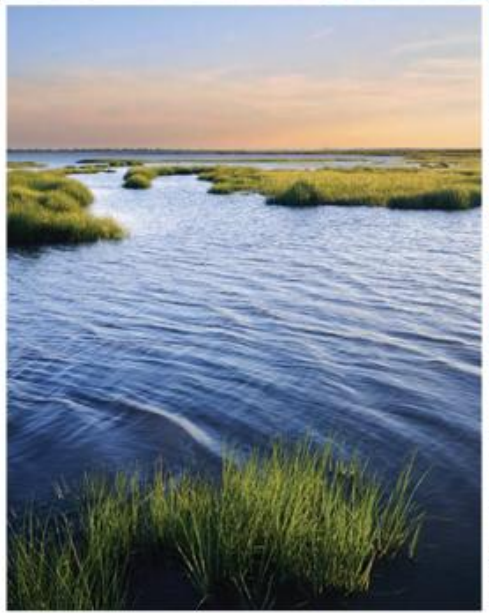


Water Quality – Low Impact Development & GI

- Green Infrastructure
  - Manages stormwater close to where it falls – intended to mimic the pre-development hydrology
  - Strategies:
    - Bioretention
    - Permeable Pavement
    - Green Roofs
    - Rainwater Harvesting (Cisterns, underground storage)
    - Increased Tree Canopy
  - Planning considerations:
    - Site plan standards, street design (subdivision bylaw), parking reform, incentive programs

Coastal Zone Management

- CZMA provides federal funding, guidelines, and technical assistance to 34 coastal and great lakes states that voluntarily agree to create plans and manage development in their coastal areas
- Plans must include:
  - Boundaries of the zone
  - Land and water uses permitted
  - Inventory of flood zones, habitats of rare or endangered species, areas best suited for development
  - Inventory of public access and plans for land acquisition,
  - Provisions for coordination with federal, state, and local agencies in administering federal water and air pollution laws



Waste & Hazardous Materials

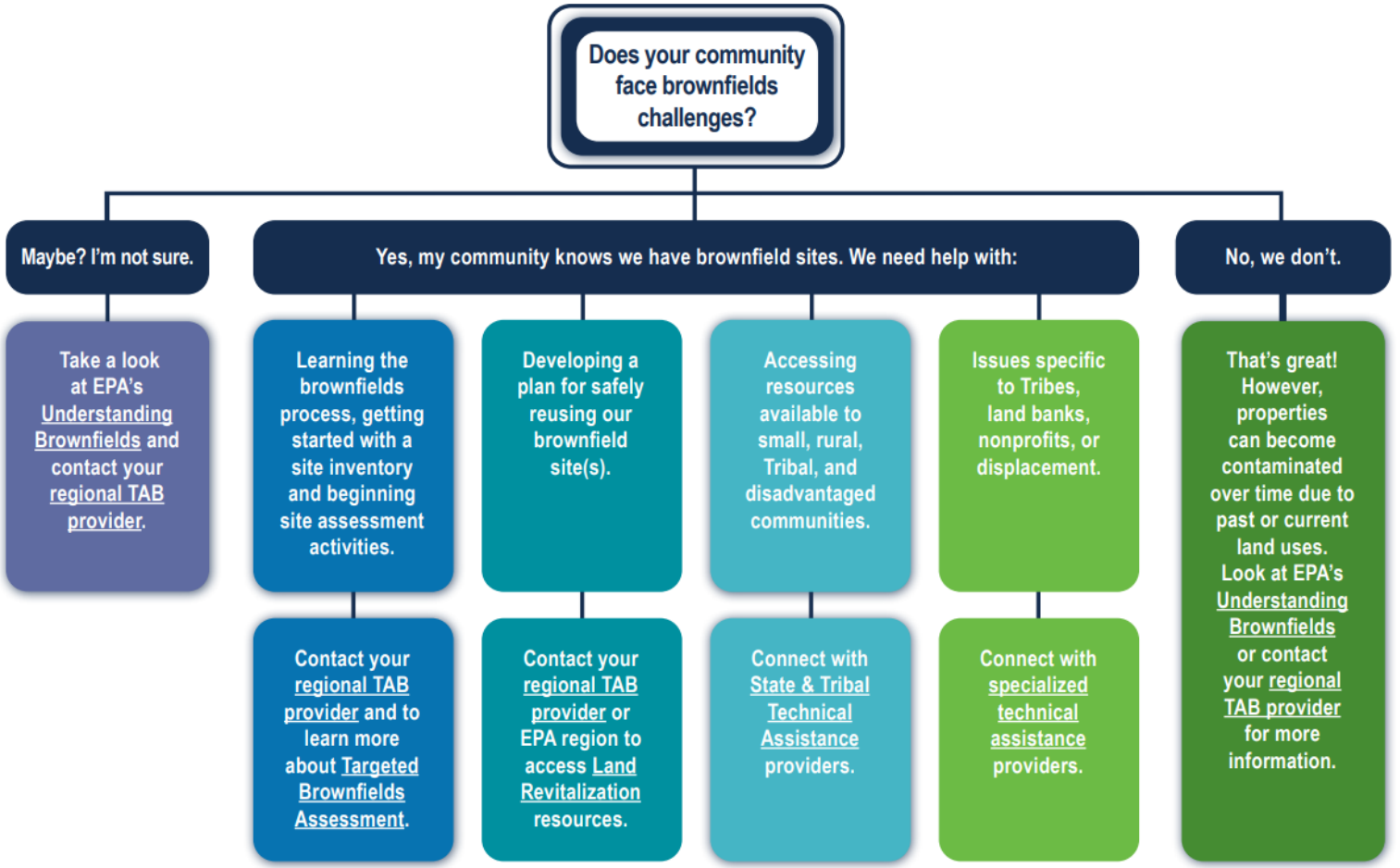
- Resource Conservation and Recovery Act of 1976 (RCRA)
  - The Act is intended to protect water supplies from the disposal of solid waste and empowers EPA to set minimum national standards for states to follow in issuing permits for new, existing, or expanded landfills –public or privately operated.
  - RCRA regulates the location of landfills, operating procedures, the design of liners, and the
  - monitoring of groundwater.

What does RCRA Regulate? →

Brownfields & Superfund Sites - CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act

- CERCLA (1980) = “Superfund” law: authorizes EPA to identify hazardous sites and create the National Priorities List (NPL); established a federal cleanup “superfund.
- Brownfield: real property where expansion /redevelopment/reuse may be complicated by actual or potential contamination.

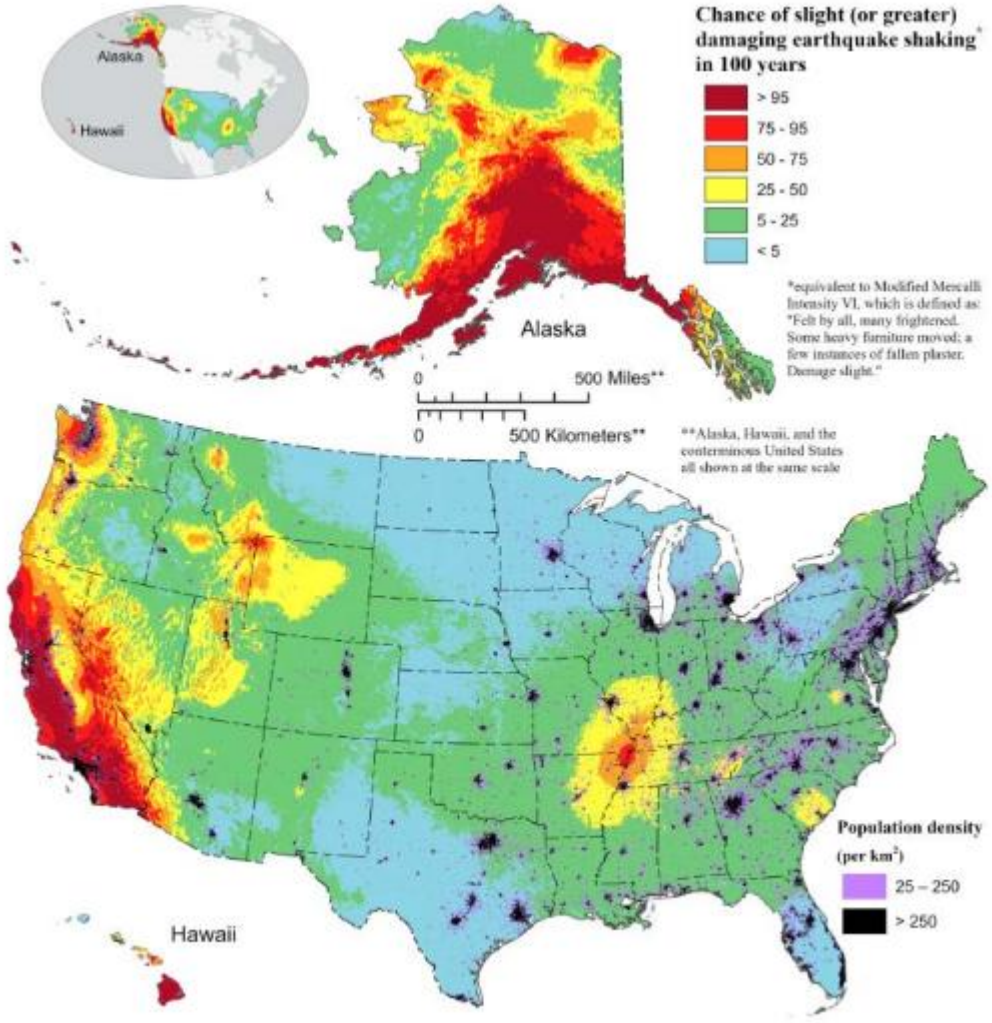


Pick choices that reduce exposure + enable reuse + protect vulnerable communities

National Earthquake Hazards Reduction Act

The Comprehensive Environmental Response, Compensation, and Liability Act

- Established the National Hazards Reduction Program under FEMA
- Intent is to:
  - Identify zones of earthquake hazards
  - Develop earthquake resistant design and construction standards
  - Develop emergency preparedness and response plans for events
  - Educate the public about earthquake hazards



Environmental Justice

- Warren County, NC, 1982.
  - Commonly known as the beginning of Environmental Justice
  - PCB Landfill Protest
  - Government Accounting Office 1983 Study: Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of surrounding Communities
  - 3 out of 4 hazardous waste sites in African American communities
- Executive Order 12898 Created the Interagency Working Group on Environmental Justice (IWGEJ).
  - Guidance under the NEPA

- Minority:
  - American Indian or Alaskan Native
  - Asian or Pacific Islander
  - Black
  - Hispanic

Low-Income:

- Households below the poverty threshold
  - Based on number of individuals
  - Dollar amount varies
    - Family sizes, age of members, etc.
    - Annually updated by census bureau

Identify disproportionate burden on minority and low-income populations. Best answers typically favor transparent, inclusive decision making

Other Federal Agency Missions

Army Corps of Engineers

- To deliver vital engineering solutions, in collaboration with our partners, to secure our Nation, energize our economy, and reduce disaster risk.

Department of Interior

- To protect and manage the Nation's natural resources and cultural heritage; to provide scientific and other information about those resources; and to honor its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated Island Communities.

Environmental Protection Agency

- To protect human health and the environment

Bureau of Reclamation

- To manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. (NOTE: Agency functions west of Mississippi River states)

4

Case Studies & Practice Questions

Mini Case Study #1: Coastal Flood Resilience

Scenario: Harborville is a coastal city with repeated nuisance flooding, a low-income waterfront neighborhood, and an aging combined sewer system. The city is updating its comprehensive plan and zoning.

Practice questions

1. Which FIRST step best matches a hazard mitigation planning process?

2. Which zoning tool most directly reduces future flood exposure while supporting equity?

3. Which option best reflects life-cycle analysis in selecting a stormwater investment?

4. Which engagement approach best aligns with core planning values?

Mini Case Study #1: Coastal Flood Resilience

Scenario: Harborville is a coastal city with repeated nuisance flooding, a low-income waterfront neighborhood, and an aging combined sewer system. The city is updating its comprehensive plan and zoning.

Practice questions

1. Which FIRST step best matches a hazard mitigation planning process?
   1) Start with hazard identification and a vulnerability/risk assessment.

2. Which zoning tool most directly reduces future flood exposure while supporting equity?
   2) Flood hazard overlay with freeboard + incentives for elevation/retrofits, paired with anti-displacement measures

3. Which option best reflects life-cycle analysis in selecting a stormwater investment?
   3) Compare total costs over time (maintenance, replacement) and avoided damages; not just upfront cost.

4. Which engagement approach best aligns with core planning values?
   4) Engage with, and encourage participation from, affected residents using accessible, transparent, multilingual engagement.

Mini Case Study #2: Heat, Shade, and Zoning

Scenario: Sunvale is experiencing more extreme heat days. Tree canopy is lowest in renter-heavy neighborhoods. A corridor rezoning and street redesign are underway.

Practice questions:

1. Which intervention best advances the ‘Healthy Community’ and ‘Interwoven Equity’ principles together?

2. Which metric is most appropriate to evaluate outcomes over time?

3. Which answer choice best represents systems thinking?

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Scenario: Sunvale is experiencing more extreme heat days. Tree canopy is lowest in renter-heavy neighborhoods. A corridor rezoning and street redesign are underway.

Practice questions:

1. Which intervention best advances the ‘Healthy Community’ and ‘Interwoven Equity’ principles together?
   1) Shade + cooling investments targeted to heat-vulnerable areas, paired with tenant protections.

2. Which metric is most appropriate to evaluate outcomes over time?
   2) Track heat-related illness, canopy coverage, and access to cooling centers by neighborhood.

3. Which answer choice best represents systems thinking?
   3) Consider land use, mobility, canopy, energy burden, and public health interactions.

Rapid review

Summary take-homes

- Use APA's six principles to classify options quickly
- Risk = likelihood × consequence; mitigation includes land use strategies
- Look for equity & transparency in the best answers
- Life-cycle thinking: O&M & avoided damages & co-benefits
- Environmental law questions are often vocabulary & process (NEPA, NPDES, SIP)

Test-taking tips

- Know definitions: sustainability, resilience, mitigation vs adaptation, EJ
- Memorize key acronyms: NEPA (CE/EA/EIS/FONSI), CAA (NAAQS/SIP), CWA (NPDES/TMDL/404)
- Answer the question asked (FIRST/NEXT/BEST) watch out for qualifiers
- Eliminate extremes (always/never) unless clearly correct
- Prefer integrated solutions over single-discipline fixes
- If two answers are both 'good,' choose the one that is equitable + feasible + implementable

Mini Quiz

Mini Quiz

1. A project uses federal funding and may significantly affect environmental quality. Which NEPA document is most likely required?

A) Categorical Exclusion (CE)
B) Environmental Assessment (EA)
C) Environmental Impact Statement (EIS)
D) Finding of No Significant Impact (FONSI)

2. Under NEPA, which statement is MOST accurate?

A) NEPA directly approves or denies projects
B) NEPA is primarily an evaluation and disclosure process
C) NEPA applies only to private projects
D) NEPA replaces all state environmental review laws

Mini Quiz

1. A project uses federal funding and may significantly affect environmental quality. Which NEPA document is most likely required?

A) Categorical Exclusion (CE)
B) Environmental Assessment (EA)
C) Environmental Impact Statement (EIS)
D) Finding of No Significant Impact (FONSI)

Federal action & potentially significant impacts means EIS; EA is for uncertain significance; FONSI is a conclusion of EA.

2. Under NEPA, which statement is MOST accurate?

A) NEPA directly approves or denies projects
B) NEPA is primarily an evaluation and disclosure process
C) NEPA applies only to private projects
D) NEPA replaces all state environmental review laws

NEPA is an evaluation/ notification (disclosure) process; it does not itself make the decision.

Mini Quiz

3. Which Clean Air Act concept links federal standards to state action plans?

A) NPDES
B) State Implementation Plan (SIP)
C) TMDL
D) Section 404

4. Which is one of the six criteria pollutants regulated under the Clean Air Act's NAAQS?

A) Methane (CH_4)
B) Ozone (O_3)
C) Radon (Rn)
D) Chlorofluorocarbons (CFCs)

Mini Quiz

3. Which Clean Air Act concept links federal standards to state action plans?

A) NPDES

B) State Implementation Plan (SIP)

C) TMDL

D) Section 404

States prepare SIPs to demonstrate how they will meet National Ambient Air Quality Standards (NAAQS).

4. Which is one of the six criteria pollutants regulated under the Clean Air Act's NAAQS?

A) Methane (CH_4)

B) Ozone (O_3)

C) Radon (Rn)

D) Chlorofluorocarbons (CFCs)

Ozone is a criteria pollutant under NAAQS (along with Pb, CO, NO_2, SO_2, PM10/PM2.5).

Mini Quiz

5. A municipality must manage stormwater discharges from its storm sewer system. Which Clean Water Act program is most directly relevant?

A) Section 404 wetlands permits
B) NPDES (Section 402)
C) CERCLA National Priorities List
D) RCRA landfill siting

6. Under Clean Water Act wetlands permitting, the preferred sequence for managing impacts is:

A) Mitigate → minimize → avoid
B) Avoid → minimize → mitigate
C) Minimize → avoid → mitigate
D) Avoid → mitigate → minimize

Mini Quiz

5. A municipality must manage stormwater discharges from its storm sewer system. Which Clean Water Act program is most directly relevant?

A) Section 404 wetlands permits

B) NPDES (Section 402)

C) CERCLA National Priorities List

D) RCRA landfill siting

Municipal stormwater is regulated through NPDES permits under CWA Section 402.

6. Under Clean Water Act wetlands permitting, the preferred sequence for managing impacts is:

A) Mitigate → minimize → avoid

B) Avoid → minimize → mitigate

C) Minimize → avoid → mitigate

D) Avoid → mitigate → minimize

Section 404 permitting follows the sequence: avoid impacts, minimize impacts, then mitigate unavoidable impacts.

Mini Quiz

7. Environmental Justice planning most directly emphasizes:

A) Treating all communities identically regardless of context
B) Identifying and reducing disproportionate burdens on minority and low-income populations
C) Prioritizing economic growth over public health
D) Limiting community participation to reduce delays

8. Executive Order 12898 is most closely associated with:

A) Environmental Justice in federal actions
B) Creation of the EPA
C) The Clean Water Act NPDES program
D) The National Earthquake Hazards Reduction Program

Mini Quiz

7. Environmental Justice planning most directly emphasizes:

A) Treating all communities identically regardless of context

B) Identifying and reducing disproportionate burdens on minority and low-income populations

C) Prioritizing economic growth over public health

D) Limiting community participation to reduce delays

EJ focuses on disproportionate impacts and equitable outcomes, paired with inclusive, transparent engagement.

8. Executive Order 12898 is most closely associated with:

A) Environmental Justice in federal actions

B) Creation of the EPA

C) The Clean Water Act NPDES program

D) The National Earthquake Hazards Reduction Program

EO 12898 established an Interagency Working Group and federal EJ direction; often tied to NEPA-era practice.

Mini Quiz

9. Which statement best reflects CERCLA (Superfund) liability concepts relevant to planners?

A) Only the current owner can be liable for cleanup

B) Liability requires proof the owner knew about contamination

C) Strict liability can apply to current and prior owners, regardless of knowledge

D) CERCLA is mainly a permitting program for new development

10. A site is considered a brownfield when:

A) It is on the National Priorities List (NPL)

B) Redevelopment may be complicated by actual or potential contamination

C) It is any vacant industrial property

D) It has never had a Phase I ESA completed

Mini Quiz

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B) Liability requires proof the owner knew about contamination
C) Strict liability can apply to current and prior owners, regardless of knowledge
D) CERCLA is mainly a permitting program for new development

CERCLA includes strict liability and can apply regardless of knowledge; joint & several liability may apply.

10. A site is considered a brownfield when:

A) It is on the National Priorities List (NPL)
B) Redevelopment may be complicated by actual or potential contamination
C) It is any vacant industrial property
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Brownfield definition: redevelopment/reuse may be complicated by presence or potential presence of contamination.

APA-MA AICP Exam Prep Course

Sustainability & Resilience

Presenter:
Brian Creamer, AICP, SITES AP

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Brooke House at Olmstead Village, Mattapan, Boston, MA
Image: MASS Design Group