


GO WITH THE FLOW


Using Local Ordinances to Reduce Finished Water Consumption, Treated Wastewater Discharge and Expedite the NEPA/SEPA Process

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Outline


- Overview of the NEPA/SEPA process in NC
- Impact types
- Mitigation for impacts
- Ways to move forward as quickly and efficiently as possible



NEPA and SEPA DOCUMENTATION WHEN and WHY?

National Environmental Policy Act (NEPA):


- Federal Agencies' Projects or Programs
- Federally Funded
- Federal Lands
- All projects require review
 - May not require EA
 - Each agency decides independently
 - Rural Development (USDA) reviews an Environmental Report (ER) and converts it to a Categorical Exclusion (CE), or an EA



NEPA and SEPA DOCUMENTATION WHEN and WHY?

North Carolina Environmental Policy Act (SEPA)

- State, county, or municipal funding
 - Project must exceed review thresholds
 - 15A NCAC 01C .0304 ACTIVITIES ABOVE THE MINIMUM CRITERIA
 - Vary by project type
 - Activities of a Special Nature (NCAC 01C .0306)
 - potential for significant adverse effects on wetlands; surface waters such as rivers, streams and estuaries; parklands; game lands; prime agricultural or forest lands; or areas of local, state or federally recognized scenic, recreational, archaeological, ecological, scientific research or historical value, **including secondary impacts**




North Carolina Environmental Policy Act (SEPA)

- State, county, or municipal funding
 - Review threshold
 - Water:
 - >1MGD added capacity
 - >20% 7q10 intake
 - > 5 miles new line outside existing rights of way
 - Direct stream impacts



North Carolina Environmental Policy Act (SEPA)


- State, county, or municipal funding
 - Review threshold
 - Wastewater:
 - New discharge outside intake's river basin (IBT)
 - >500 KGD new or expanded capacity
 - > 33% 7q10 discharge
 - >100 KGD surface irrigation, high rate infiltration, or subsurface systems
 - >200 KGD reclaimed water – sole disposal
 - >500 KGD reclaimed water – combined
 - >1 MGD reclaimed water – not required for compliance
 - >3 miles of new gravity lines >18"
 - >1,750 KGM pump stations and associated force mains



NEPA/SEPA Reports

Categorical Exclusion (CE):



- Determined to have **negligible** impacts on the environment
- Do not require EA or EIS
- Each agency maintains a list of activities that are categorically excluded (Threshold)
 - Based on size, location, and potential impacts
 - EA may still be required for special conditions
 - water supply intake
 - sensitive areas
 - protected species
 - indirect impacts
- **NEPA CE** – checklist form, depending on agency
 - Rural Development (USDA) requires Environmental Report
 - Sometimes full-blown EA, sometimes "EA-light"
- **SEPA CE** – no document required
 - Normal permitting route(s)



NEPA/SEPA Reports

Environmental Assessment (EA):



- Projects exceed minimum review thresholds or
- Has special conditions
- Have **potential** for significant impacts
- Thoughtful planning and design necessary
- Impacts must be avoided, minimized, and mitigated
- Subject to inter-agency review
 - Federal – individual coordination/contact
 - State – through the "Clearinghouse"
- Agencies often differ in opinions about impacts' "significance"
- Lead agency has ultimate authority to decide if:
 - Other agencies' concerns have been adequately addressed
 - Unavoidable impacts are **minor**
 - EA is appropriate
 - Is an EIS necessary?
- Finding of No Significant Impact (FONSI) published

NEPA/SEPA Reports

Environmental Impact Statement (EIS):

- Significant, unavoidable impacts
- Benefits outweigh impacts
- Topics addressed similar to EA
 - Much more detailed, particularly:
 - Alternatives analysis
 - Detailed comparison of impacts
 - Public involvement
 - Cost benefit analysis
 - Accepts that some impacts cannot be fully mitigated
 - EIS from start
 - EA can be converted into EIS
 - Additional evaluation of alternatives
 - Additional public involvement
 - Record of Decision (ROD) Issued
- Can usually be avoided by providing more detailed information, public involvement and **EARLY** interagency scoping/contact





Good Coordination is Key

Proponents - Multi-disciplinary Design Team - Agencies

Early & Ongoing Integration - SCOPING

- Summarize existing ordinance language and likely agency interpretation to project partners early
- Describe project and reasons for alternative selection
- Include estimated environmental impacts – all types
- Provide a detailed and accurate map of project construction footprint AND service area(s)

Impact Types

Natural Environment

- Geography and Soils
- Wetlands & Floodplains
- Surface Water Quality
- In-Stream Flow & Transfer
- Fish & Shellfish Habitats
- Wildlife & Terrestrial Habitats
- Forest Resources
- Protected Species
- Special High Quality Habitats




Impact Types

Human/Health

- Aesthetics
- Land Use
- Air Quality
- Noise
- Socio-Economic/ Environmental Justice
- Public Recreation Lands
- Historic & Archaeological
- Hazardous Materials
- Public Water Supplies
- Boating & Navigation




Avoidance, Minimization and MITIGATION

Direct Impacts – Design, Construction, Operation
 Consideration of impacts at the **FRONT END** not as an **AFTERTHOUGHT**

- Minimization or elimination does not release a project
- The first and easiest hurdle




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Avoidance, Minimization and MITIGATION

Secondary Impacts (indirect)

- The domino effect to:
 - Land use
 - Density
 - Growth rates
- Additional impacts to:
 - Air
 - Water
 - Natural resources
 - Cultural resources
- Encroachment and alteration – affect function and value of natural systems




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Avoidance, Minimization and MITIGATION

Cumulative Impacts –

- More significant and long-lasting than direct or secondary impacts
- Dominos hitting a house of cards

SYNERGY

- Collective degradation
- Incremental impact + incremental impact = Exponential impact

• A bridge to nowhere will eventually lead somewhere




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MITIGATION

Secondary & Cumulative Impacts

Local Ordinance Language/Inter-local Agreements

Preservation/Protection

Stormwater/Low Impact Development

Water Resources Use and Efficiency Maximization

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MITIGATION

Secondary & Cumulative Impacts

Local Ordinance Language/Inter-local Agreements

Preservation/Protection

Aquatic buffers	Open Space
– filtration	– less clearing and grading
– flood control	– less impervious surface area
– bank stabilization	– more stormwater retention
– wildlife habitat	

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Secondary & Cumulative Impacts

Local Ordinance Language/Inter-local Agreements

CAUTION


Don't Make Open Space a Wash

development standards should be based on **developed area density**
NOT TOTAL PARCEL DENSITY

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MITIGATION
Secondary & Cumulative Impacts
Local Ordinance Language/Inter-local Agreements
Stormwater Management and BMPs

- Minimize stormwater runoff to reduce
 - Flooding
 - Siltation
 - Temperature increases
 - Streambank erosion
 - Nonpoint source pollution
- Mimic pre-development hydrology



MITIGATION
Secondary & Cumulative Impacts
Local Ordinance Language/Inter-local Agreements
Consumptive Use for New Irrigation Systems

- Prohibit the use of potable water in irrigation systems
- Prohibit the use of groundwater in irrigation systems



MITIGATION
Secondary & Cumulative Impacts
Local Ordinance Language/Inter-local Agreements
Consumptive Use for New Irrigation Systems

- Require new irrigation systems to use:
 - Stormwater
 - Reclaimed water

OR BOTH



MITIGATION
Secondary & Cumulative Impacts
Local Ordinance Language/Inter-local Agreements
Consumptive Use for New Irrigation Systems

- Stormwater for irrigation
 - Cisterns
 - Rain barrels
 - Detention ponds




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Basilica Cistern, Istanbul 532



MITIGATION
Secondary & Cumulative Impacts
Local Ordinance Language/Inter-local Agreements
Reclaimed Water Reuse

Purple Pipe Positives

- Reduces consumptive potable water use
- Reduces discharge volume
- Allows potable storage and treatment capacity to serve more households




MITIGATION

Secondary & Cumulative Impacts

Local Ordinance Language/Inter-local Agreements
Reclaimed Water Reuse

Purple Pipe Positives

- Slows necessary expansions of potable and wastewater treatment capacity
- Expedites NEPA/SEPA review/approval




MITIGATION

Secondary & Cumulative Impacts

Local Ordinance Language/Inter-local Agreements
Reclaimed Water Reuse

Purple Pipe Purposes

- Landscape irrigation
- Dust control
- Soil compaction
- Non-potable industrial processes
- Cooling




Tips to Avoid the Logjams and Falls

Administrative/Regulatory involvement early and often

May seem cumbersome and not well received at the front end, and often isn't, but it is invaluable to having projects float through the process, not get stuck on sandbars and rocks




Tips to Avoid the Logjams and Falls

GO WITH THE FLOW!!!!!!!!!!!!!!




Using the current to your advantage to navigate around obstacles is much easier, and faster, than paddling upstream

Mapping the route from the outset will allow you to avoid any unnecessary portage




The DENR SEPA Guidance Document

Doesn't provide a solution to the ever-evolving permitting river – just a map to keep you out of class IV rapids

Let's not turn the South into the West where:

"Whiskey is for drinking, water is for fighting." Mark Twain

