INTEGRATED FRAMEWORK PLANNING

A FLEXIBLE FRAMEWORK FOR MAXIMIZING COMMUNITY BENEFITS FROM INFRASTRUCTURE INVESTMENTS
POTENTIAL CHALLENGES

- Return on investment
- Competing needs and siloed departments within jurisdictions
- Increasingly stringent regulatory requirements
- Health and safety of residents
- Ecosystem condition and function
- Community growth
- Old infrastructure
- Planning for resilient / sustainable communities
Many options have been used over the years:
- Each has strengths and limitations
- Many achieve a specific regulatory requirement, but do not connect other priorities

Integrated Framework Planning takes planning further to also cater to a community’s needs and resources.
INTEGRATED FRAMEWORK PLANNING

The marriage of EPA’s Integrated Planning process and a Framework Planning approach that has traditionally been implemented in urban planning and landscape architecture.
A PROVEN APPROACH
INTEGRATED FRAMEWORK PLANNING PROCESS

1. Visioning

2. Opportunities & Constraints

3. Develop Integrated Framework Plan

4. Implement

5. Measure, Assess & Adapt
THE FRAMEWORK INCORPORATES KEY FEATURES

- Iterative feedback
- Programmatic integration
- Data convergences
- Flexibility to consider multiple drivers
INTEGRATED FRAMEWORK PLANNING: CLUSTERS AND CORRIDORS

- **Riparian Trail/Greenway**: uses trail system as a "backbone" for surrounding riparian restoration, incorporating green infrastructure, improving biker and pedestrian safety, connecting green space, and improving tree canopy.
- **Neighborhood Center**: addresses recreation or other community features while increasing tree canopy to reduce heat island effect, and incorporating green infrastructure and native landscaping.
- **Green Street**: includes traffic calming, accommodating pedestrian and bike users, and green infrastructure.
- **Wetland Restoration**: restores wetland function to help manage flooding, improve water quality, provide critical wildlife habitats, and add recreational opportunities.
- **Conservation Development**: includes clustered housing, improved pedestrian infrastructure, and green infrastructure to create unique neighborhoods.
- **Parking "Garden"**: modifies a traditionally utilitarian space with GI to enhance treatment of stormwater runoff.
- **Green Alley**: enhances water quality and addresses localized flooding.
- **Redevelopment**: builds on existing planning efforts to enhance water quality improvements and community amenities.
EXAMPLES
WALLER CREEK, AUSTIN, TX

Iterative feedback...
- Stakeholder feedback
- Joint Development Agreement between the City and the Waller Creek Conservancy

Programmatic integration...
- Stream ecology, recreation, redevelopment

Multiple drivers...
- Modeling, feasibility, cost (capital, operations and maintenance)

Data convergences...
- Trail network, utilities, trees, slopes, aquatic habitats, stormwater retrofits, hydraulics & hydrology

Combining projects...
- Tunnel
- Chain of parks and stream restoration
Iterative feedback...
- Stakeholder involvement
- Multiple government agencies

Programmatic integration...
- New development, flooding, naturalization of river

Multiple drivers...
- Complex regulations

Data convergences...
- Recreation, new development, areas of flooding

Combining projects...
- Lower Don Lands waterfront

Iterative feedback...
- Extensive stakeholder involvement
- Ownership and ease of permit approval

Programmatic integration...
- Wet weather programs as well as habitat, potable water, land conservation, pedestrian safety, recreation

Multiple drivers...
- NPDES permit, feasibility, affordability, unknowns

Data convergences...
- Overlay water resources with community needs

Combining projects...
- Ex.: Greenway with stormwater management and pedestrian and bike safety
Technical
- Modeling
- Data analysis

Communication
- Outreach & Education

Coordination
- Technical Stakeholder Involvement

PERMIT

GOALS RELATED TO:

• Pollution and Stormwater Peak Flows
• Habitat
• Public Engagement & Action
• Land Conservation & Management
• Partnerships
• Water Conservation
• Recreation
• Monitoring

STRATEGIES RELATED TO:

• Riparian areas
• Green Infrastructure in MS4
• Green Infrastructure in CSS
• Stream Restoration
• Native & Invasive Species
• Trees
• Land Conservation
• Potable Water Conservation
• Pollution I.D. & Reduction
• CSS Infrastructure
QUANTIFIABLE TARGETS

Metrics used to rank and prioritize strategies

• Examples:
  – Impervious surface reduced or treated (acres)
  – Habitat protected or restored (acres)
  – Streams restored (feet)
  – Stormwater volume discharge reduced (MG)
  – Average yearly TN load reduction (lbs)

Quantifiable targets for each strategy

GI in CSS
Target: 18 acres
Achieved: 4 acres

Stream Restoration
Target: 2,500 ft
Achieved: 15,580 ft

Trees
Target: 80 acres, 24,000 trees
Achieved: 24 acres, 7,124 trees
KEY ISSUES ADDRESSED IN PLANNING PROCESS

• Building Relationships
  – Establishing a Vision
  – Translating Technical Complexities
  – Learning to Plan Collaboratively
  – Keeping Stakeholders Engaged

• Preventing Derailment
**KEY ISSUE:**

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<thead>
<tr>
<th>Challenges</th>
<th>Solutions</th>
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<tbody>
<tr>
<td>• Communicating details                                                   • Ensure information is detailed, accessible, and transparent</td>
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<td>• Managing expectations                                                    • Cast a wide net</td>
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<td>• Breaking down silos                                                     • Involve a third-party mediator</td>
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<td>• Building trust                                                          • Structure of meetings and events can have a significant impact on the amount of feedback received – presentation vs. open house</td>
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<td>• Are stakeholders understanding and learning?</td>
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Keep talking to people!
**KEY ISSUE:** Preventing Derailment

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<td>• Addressing single-issue participants</td>
<td>• Separate people from the problem</td>
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<td>• Preventing melt-down when things get heated</td>
<td>• Involve a third-party outreach firm and mediator</td>
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<td>• Preventing post-process push-back</td>
<td>• Keep inviting participants to the table</td>
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Stay the course!
“We salute the process by which Richmond worked with stakeholders -- CBF, DEQ, water quality scientists, many NGOs, and others -- to help develop this integrated Permit (and the associated RVAH2O Clean Water Plan) as a model of meaningful collaboration, rich public involvement and committed transparency. We hope and believe it will prove to have deepened the interested public's understanding of applicable requirements, the challenges associated with meeting those requirements, and the opportunities that are available to incorporate green infrastructure and other strategies with a variety of co-benefits.”

Peggy Sanner,
Virginia Assistant Director and Senior Attorney
Chesapeake Bay Foundation

Mayor Levar Stoney – speaking at the RVA Clean Water Plan VPDES permit issuance celebration
Bellemade Walkable Watershed

Partners:

- Bellemeade Walkable Watershed

The Numbers

- 850sf of asphalt to planters
- 800sf bioretention
- 77 trees
- 663 native plants
- 3 Filterra
- Pollution reduction
  - 12.73 lbs/yr Nitrogen
  - 2.05 lbs/yr Phosphorous
  - 0.317 tons/yr Solids

*Numbers may change. Design under revision*
Green Work Force Development
QUESTIONS?
THANK YOU

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