

# Prospective Restoration / Restoration Up Front: An Incentive-Based Approach to Increase Restoration Activities

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# Discussion Points

- What is Restoration Up Front?
- Possible approaches
- How a project might work
- Benefits
- Potential challenges
- Next steps

# Remember We've Just Gotten Started....

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# Disclaimer

The concepts discussed in this presentation are preliminary and do not represent formal positions or policy of the authors home organization or any professional or industry trade group with which the authors may be represented.

# What is Restoration?

- **Improving an existing habitat**
  - Common/preferred in a regulatory context
- **Creating a habitat**
  - Compensating or mitigating for an action
- **Acquiring and conserving habitat**
  - Common where restoration opportunities are constrained

# What is Restoration Up Front?

- **Incentive** for companies to step up and restore valuable habitats
- **Mechanism** for Trustees to consider the restoration to cooperatively resolve natural resource or other liability at a later date
- Takes advantage of **opportunities to proactively restore** large contiguous tracts of habitat at the landscape scale
- Also known as **Prospective Restoration** or **Restoration Banking**

# Possible Analogues

- Banking for CWA Section 404 mitigation credit
- Conservation Banking for endangered species management
- Emissions Trading
- Water Quality Trading



# Why might Restoration Up Front be useful?

- **Promotes restoration** – collaborative, incentive based
- Planned **restoration today instead of tomorrow**
- Establishes valuation process and potential settlement early
- Potentially **decreases overall costs**
- Expands project base for **urbanized watersheds** that have limited opportunities for restoration
- Provides **incentives to land owners** to dedicate ecologically valuable property in a natural and managed state



# Benefits

**Industry** – increases predictability, reduces uncertainty, creates additional opportunities, flexibility and efficiency for restoration and liability relief

**NGOs** - mechanism to increase conservation capital and sooner

**Regulatory Agencies / Trustees** – process oriented, proactive, allows functional resources in advance, provides mechanism to accept credits

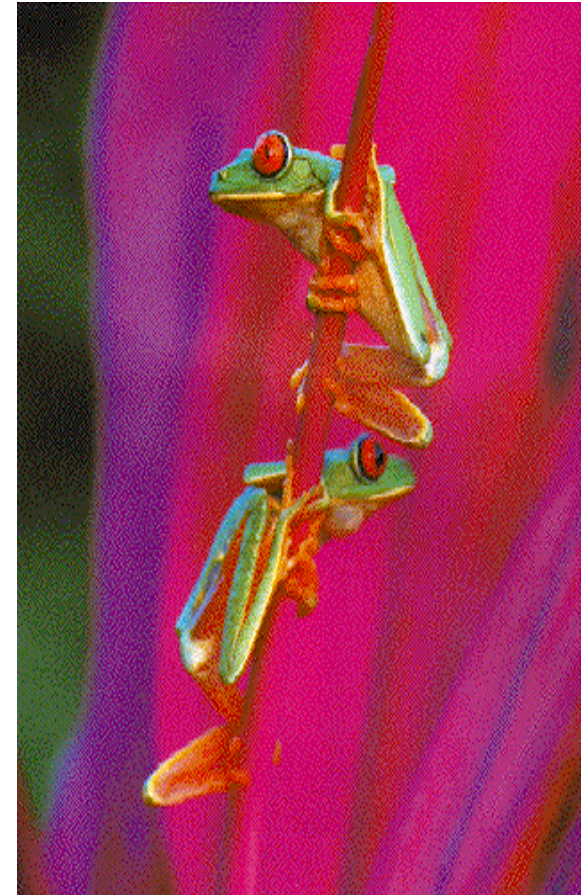
# Possible Restoration Up Front Approaches

**Restoration Aggregation / Pooling**

**Restoration Credits Trading**

**Prospective Restoration**

**Investment Restoration**



# How Restoration Up Front Might Work

- An entity undertakes **restoration**
- Restoration and services provided by the resource or habitat are **quantified by trustees**
- Entity has a “**letter of credit**” certifying credit assigned by trustees
- “Credit” is good so long as the restoration is not harmed
- “**Exchange rates**” may apply for different habitat/resource types
- **Bank is virtual** and a number of entities could be responsible for the credits (NGOs, future market?)

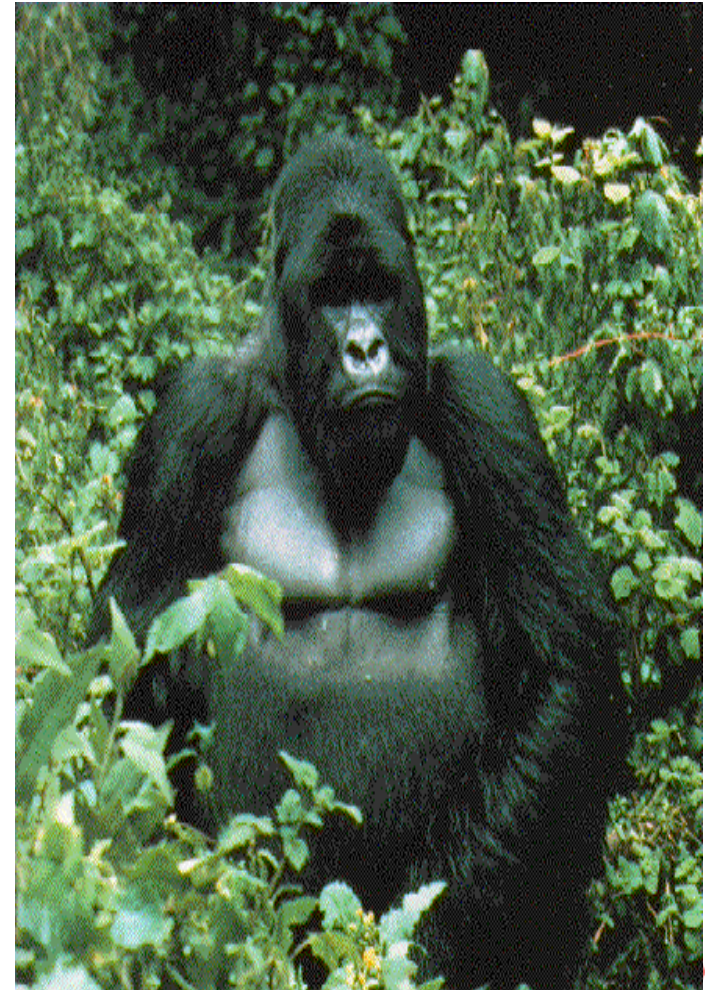
# Potential Challenges

## Policy

- Need One
- The Name
- Legal Ramifications
- Compliance with NEPA
- Public Acceptance
- Future Claims

## Technical

- Common Currency (for now, DSAY)
- Geographical Limits
- Trustee Resources
- Paucity of Pilot Sites



# Restoration Up Front Efforts to Date

- Draft concept paper circulated among industry, trustees and conservation organizations (2004)
- DuPont & Chevron co-sponsored workshop (2006)
- NOAA DARRP preliminary working paper (Feb 2007)
- Peer-reviewed publication (Stahl et al, *Integrated Environmental Assessment and Management*, in press, January 2008)
- Ongoing pilot sites in WA and TX



# Next Steps

Continue to finalize and identify suitable pilot sites

- Continue progress in TX, DE, and NJ
- Working with NJDEP, DNREC, NOAA, USFWS

Work with Partnership for Delaware Estuary

- Regional Restoration Initiative



Continue dialog with trustees and conservation community

**Thank you for the interest**

