

CB Node Summary—January 21, 2005

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Node Description

The Chesapeake Bay Node includes Pennsylvania, Maryland, Virginia and the District of Columbia. There are 5364 projects in the NRRSS database from the Chesapeake Bay Node.



Figure 1. Chesapeake Bay Watershed (from *Chesapeake Bay Program*)

Intent & Cost

In the Chesapeake Bay Node the most frequently reported goal for stream restoration projects (Figure 2) was riparian zone management (56% of all projects stated this goal) and this typically included activities such as planting riparian buffers and fencing for livestock exclusion.

The second most commonly stated goal (37%) was to improve water quality. Projects aimed at improving water quality contained a wide range of components; some examples include, agricultural best management practices, riparian buffer creation and wetland creation. Note that many projects that targeted riparian management were also implemented to improve water quality.

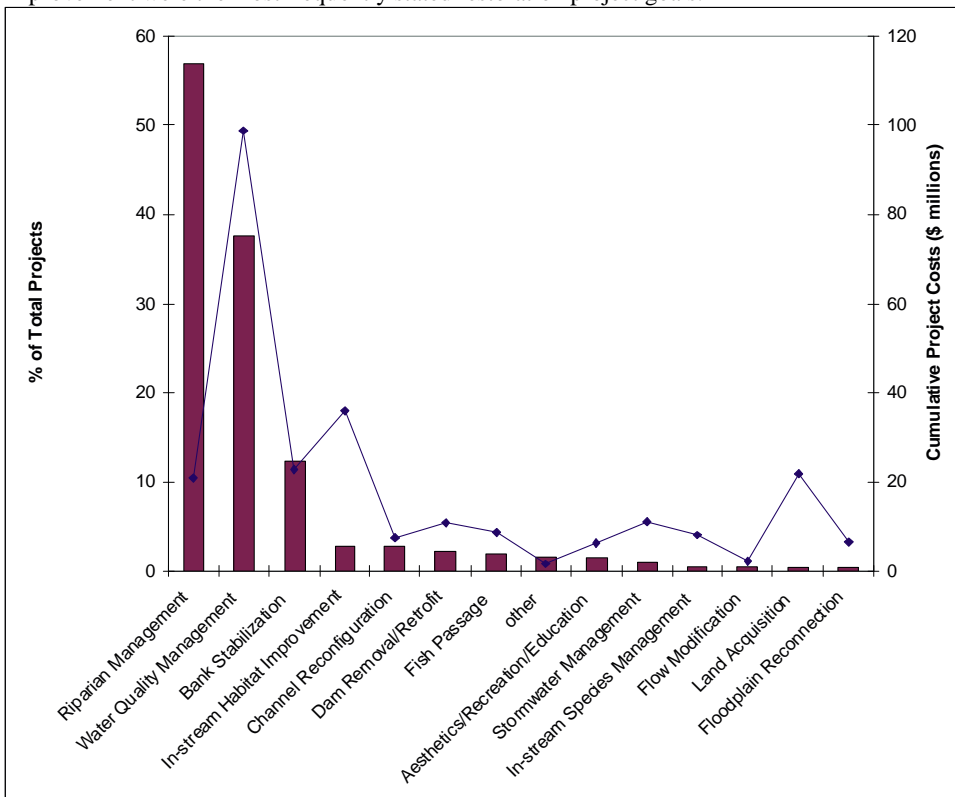
The third most commonly stated goal (12%) was to stabilize stream banks and included practices designed to reduce or eliminate erosion or slumping of bank material into the stream channels. 28% of project records stated more than one goal; many projects with more than one goal included both riparian management and water quality improvement. Note that those project records that did not explicitly state the goal of the project (25% of projects) are not included.

Only 40% of the project records reported costs but even for this subset, the expenditures that were reported in the written data sources were over \$249 million. When this estimate is extrapolated to the total number of projects in the database, an estimated \$726.6 million has been spent on stream restoration within the Chesapeake Bay watershed since 1980. Between 1990 and 2003 alone, at least \$172 million was spent – because this represents expenditures for only the projects that

Comment: (One way to interpret the large amount of restoration aimed at riparian management is the way in which stream restoration is being approached in the region; the C2K agreement prioritizes riparian buffer establishment. Hence, from what I've read about what's going on in many parts of Virginia and PA (and MD), a lot of restoration money is being spent on buffers and agricultural BMPs. There might be a paper trail back from CREP funding to whether the farmers or the program actually monitored the projects, but I doubt it.)

reported costs (40% of the projects), expenditures were surely much higher. Further, 30 of these projects from 1990-2003 reported costs of \$1 million or greater (totaling \$124.5 million). Excluding these expensive projects, the average per project cost is approximately \$44,000 the median cost is \$9,200.

Figure 2. Distribution of project goals (n=5364 projects) and cumulative project costs for each category (n=2162 projects) on the secondary axis. Riparian management and water quality improvement were the most frequently stated restoration project goals.



Monitoring

6% of projects indicated monitoring.

Figure 3. Distribution of monitored projects across the thirteen goal categories. Note that most project records (91%) gave no indication of whether or not monitoring was completed.

