## Recovery Potential Metrics Summary Form

Indicator Name: POLITICAL SUPPORT

Type: Social Context

**Rationale/Relevance to Recovery Potential:** The support for specific actions or programs that carry out restoration can be an influence on likelihood of restoration success. This support can be demonstrated in public opinion, in public leaders' positions, or through both. Frequently the degree of community support and political support are in alignment. Thus political support for restoration actions can be an effective metric representing not only general likelihood of community backing but also the existence of influential backing from community leaders.

**How Measured:** Plausible to estimate via a group ranking process with generalized categories of support.

Data Source: Sources of this information are likely to vary from state to state.

## Indicator Status (check one or more)

X_	<u>Developmental concept</u> .
	Plausible relationship to recovery.
	Single documentation in literature or practice.
X_	Multiple documentation in literature or practice.
	Quantification.

## Comments:

## Examples from Supporting Literature (abbrev. citations and points made):

- (Leach and Pelkey 2001) themes relating to watershed partnership success include [note that bolded ones are spatially representable for recovery screening with existing data while others are usually not available as spatially explicit data]: funding, broad and inclusive membership, committed participants, effective leadership, bottom-up leadership vs balanced among levels, trust, low or moderate conflict (vs none), geographic scope, limited scope of activities, adequate time, well-defined process rules, consensus rules, formal enforcement mechanisms, effective communication, adequate sci-tech info, monitoring data on outcomes, training in collaboration, <u>agency</u> support and participation, legislative encouragement, community resources.
- (Bernhardt and Palmer 2007) The restoration options for urban streams are highly constrained by available land, urban infrastructure, political pressures, and a lack of technical knowledge about how to apply standard restoration techniques in urban settings (Nilsson et al., 2003; Niezgoda & Johnson, 2005) (746).
- (Gregory et al., 2002) The precautionary principle generally suggests that, in the face of uncertainty, efforts to reduce impacts are prudent and reversible choices should be favored over irreversible choices (Ludwig et al. 1993). But this too may be inadequate unless we integrate the larger cultural backdrop (social, economic, political, and legal aspects) concerning decisionmaking (721).
- (Gregory et al., 2002) Dam removal or the breaching of dams will be controversial in many cases because of the many vested social and political interests. The role of science

in forming policy is rapidly changing, and public confusion over the positions of dueling scientists is not uncommon (721).

- (Gregory et al., 2002) Though these alternative actions would not entirely negate the potential benefits of dam removal, decisionmakers are rarely faced with the task of simply removing a dam; the factors that led to its construction continue to influence community actions (716).
- (Gregory et al., 2002) Public values and social actions also have large effects on ecosystems and the nature of resource decisions. Most people are reluctant to deconstruct anything they built and financed, even if they later realize that the decision may have been flawed (721).
- (Walsh et al., 2005) A critical factor in restoration and conservation of urban streams and their catchments is the human population (Booth 2005), suggesting that effective management of these streams will require a broader perspective than traditional stream ecology, one that includes social, economic, and political dimensions (707).
- (March et al., 2003) Governmental officials of tropical islands need to make a commitment to use their freshwater resources as sustainably as possible (1077).
- (Lake et al., 2007) With the increasing awareness of the economic, ecological and social losses arising from stream degradation, pressures to conserve and restore flowing waters have gathered strength in recent times (Palmer et al., 2004; Bernhardt et al., 2005; Dudgeon et al., 2006) (598).
- (Filipe et al., 2004) Once reserve areas have been selected, they must be integrated within a basin management approach to harmonize development opportunities and exploitation of aquatic resources (Meffe 2002). There is also a need for ecologists, conservationists, social scientists, and stakeholders to negotiate use rights (Cullen et al. 1999). In multinational water bodies, such as the Guadiana River basin, international collaboration is needed and all social, economic, and political constraints should be considered. Additionally, the establishment of discrete reserves is not enough to protect freshwater fishes (Angermeier 2000; Meffe 2002). Interventions upstream or downstream must be considered in the management of reserves because these activities could have implications for the species for which the reserve is designed (Cowx & Collares-Pereira 2002). In particular, the construction of a dam outside of the reserve network has implications for the recolonization of each reserve area because it may disrupt migration pathways. Similarly, the introduction of alien species elsewhere in the watershed may have long-term implications if the introduced species is able to disperse into the reserves. In our case study, the Alqueva and Pedrogao reservoirs will create unsuitable habitats for native fishes by affecting their movement and enhancing the populations of exotic species. In addition, the lack of facilities for fish passage around Algueva has permanently isolated the populations upstream and downstream of the dam (197).
- (Bernhardt and Palmer 2007) A recent synthesis of river restoration project information for the United States, the National River Restoration Science Synthesis (NRRSS). (Bernhardt et al., 2005), suggests that urban streams receive a disproportionately large share of river restoration monies and effort (Fig. 5). In Maryland, for example, 30% of all river restoration projects over the last decade and about 50% of all reported river restoration funds were spent in the four (of 23) most densely populated counties (Hassett et al., 2005). In part, this concentration of river restoration effort in urban areas may be a response to the more intense degradation in these systems. However, much of the restoration may be motivated by needs to protect streamside infrastructure or by requirements to spend mitigation monies within the same political boundaries as new development. It may also be argued that a large portion of taxpayer money devoted to restoration should be spent to improve the immediate environment of cities, where the majority of people live (742).