

2-9-09

**Texas Instream Flow Program
Middle & Lower Brazos Study Design Workgroup**

Objectives

Biology
Identify flow regimes: <ul style="list-style-type: none">• for the benefit of the native ecosystem (i.e. habitat, flora, and fauna)• to maintain a diverse aquatic community and prevent the extinction of native species• to preserve/protect and restore/improve key habitat features for native species in river and riparian zones
Hydrology / Hydraulics
<ul style="list-style-type: none">• Identify flow regime components and their characteristics• Identify/define current, historical, and naturalized patterns of flows to determine potential environmental consequences of changing from these patterns• Identify all sources of instream flow and factors which may affect those sources
Water Quality
<ul style="list-style-type: none">• Identify flow-related water quality relationships in the four flow regime components
Geomorphology
<ul style="list-style-type: none">• Identify interrelationships among flows, bank stability, channel maintenance, and alluvial and associated aquifers
Connectivity
<ul style="list-style-type: none">• Identify how flow influences riparian zones integrity and connectivity with the river• Identify flows that support lateral connectivity (i.e. oxbows and backwaters)• Identify flows that support longitudinal connectivity

Other Objectives

The following objectives (separate from a discipline) were agreed to by the group:

- Define/determine current, historical and natural conditions in each flow regime component (overarching objective)
- Evaluate relationships between flow regimes and economic and social uses, including recreational use
- Consider how water planning studies and instream flow studies will impact and interact