

Instream flow provisions for planning and management

Florida

- State law requires that minimum flows and levels be established to limit withdrawals and prevent significant harm to water resources or ecology of the area
- Environmental values to be considered when minimum flows are established include recreation; fish and wildlife habitats; estuarine resources; transport of sediment and other materials; and water quality, among others.
- Establishes a minimum pattern of flow over the course of the year, not a single minimum flow value
- Determined for individual water bodies through site-specific studies
- Examples:
 - Up to 19% reduction in daily freshwater flow to estuary allowed; no withdrawals at extremely low flows
 - Summertime streamflows that are less than 6,600 cfs for 50% of the time would be significantly harmful
- Minimum flows and levels are used for water supply planning and in permitting of withdrawals

Alabama

- Regulations for wastewater discharge permits provide for use of annual 7Q10 in permitting
- No water withdrawal permitting program or other instream flow provisions

Tennessee

- No instream flow standard in water withdrawal permitting
- Streamflow provisions added to water quality standards in 2008
 - Streamflows shall support fish and aquatic life criteria and recreational uses in designated waters
 - Water withdrawals that remove less than 5% to 10% of the annual 7Q10 are considered to have minimal impact

South Carolina

- Established by the 2010 South Carolina Surface Water Withdrawal, Permitting, Use, and Reporting Act

- Minimum instream flows intended to maintain biological, chemical, and physical integrity of the stream and take into account the needs of downstream users, recreation, and navigation
- Minimum instream flows:
 - 40% of the mean annual daily flow for January through April
 - 30% of the mean annual daily flow for the months of May and June
 - 20% of the mean annual daily flow for the months of July through November
 - 30% of the mean annual daily flow for December

North Carolina

- Minimum instream flows regulated through State Environmental Policy Act and Safe Dams program
 - Water supply withdrawals and withdrawals greater than 20% of annual 7Q10 require a site-specific instream flow study
 - Minimum releases from dams depend on stream size and conditions of aquatic habitat
 - Very small streams and streams with poor aquatic habitat: Minimum release is annual 7Q10
 - Streams with moderate quality aquatic habitat: Minimum release is approximately equal to 15% annual average discharge
 - Streams with good quality aquatic habitat and/or special conditions: Site-specific study required
- Regional studies are currently underway to determine ecological flow needs to be used for water planning purposes (2009 Basinwide Hydrological Modeling Act)