

## Frequently Asked Questions

- **Are the previous Biological Stream Characterization (BSC) ratings still valid?**

No. Previous BSC ratings were based on fish data collected from the mid 1980's through 1993. These data were summarized using an early version of the Index of Biotic Integrity. Given that new data have been collected since 1993 and the Index of Biotic Integrity was refined in 2000, we do not recommend using the previous ratings and direct comparisons. Previous BSC ratings to our new Integrity Ratings are not appropriate.

- **What are the differences between ratings for diversity, integrity, and significance? How do I know what map to use?**

Fish, macroinvertebrate, and mussel data were used for diversity and integrity ratings, although how these data were used differed. Species richness was the primary variable used in diversity ratings, whereas multi-metric indexes or measures of intactness were used in integrity ratings. Additional information on crayfish, threatened and endangered species, and sensitive macroinvertebrates were also used in diversity ratings, but not integrity.

Diversity and integrity ratings were kept separate because it is possible to have highly intact communities that are not biologically very diverse. For instance, species richness in small or cold-water streams is expected to be low compared with larger or warmer streams. Therefore, it is possible to have a small stream that would rate high for integrity but low for diversity. Additionally, keeping the two ratings separate enables stakeholders with different purposes to consider the rating that is most applicable to their needs.

Data used for both integrity and diversity ratings were used to identify a subset of waters as biologically significant. Significant streams have at least two different taxonomic groups that are highly diverse and/or intact. These stream segments are unique resources in the state and the biological communities present must be protected at the stream reach, as well as upstream of the reach.

- **Why were additional taxa used in the new ratings?**

Because the rating system was revised to meet a new need (implementing the Wildlife Action Plan), fish, mussel, macroinvertebrate, crayfish, and threatened and endangered species data collected by various state agencies were used for stream ratings. The Wildlife Action Plan broadly addresses all aquatic taxa, thus the ratings include information on all aquatic taxa readily available.

- **Why aren't all taxonomic groups represented in all ratings?**

The new rating process was built to accommodate data for all taxonomic groups when they are available. All taxonomic groups are currently not available at all locations, but the system is flexible to allow ratings based on data currently available. As data become available, they will be included in the ratings.

- **The maps appear to have fewer streams rated than previously. Why is that?**

Previous and current ratings were based on data collected in a stream reach (approximate 100-300 m), and these data were then applied to longer reaches of streams. In this project, data were applied to valley segments, which are groupings adjacent stream reaches that share physical characteristics like temperature, flow, and surficial geology. In most cases, the valley segments used in this project are shorter than the stream reaches used previously. Therefore, it appears that fewer streams are rated, when actually more stream reaches were rated in this project.

- **Why aren't big rivers rated?**

Because the revised process relied heavily on existing indices, ratings were only applied to the size of streams for which these indexes were developed. Therefore, non-wadeable streams are not rated in this report despite some larger streams being rated in previous efforts that used a different methodology.

- **Why did my stream that was rated A previously change to a C?**

Several reasons may explain why previous stream ratings have changed through this project including: a new process evaluating diversity and integrity data, addition of data previously unavailable, revision to the fish Index of Biotic Integrity and Threatened and Endangered species list, and changes in stream condition. Because previous stream ratings may have changed for these reasons, comparisons of new ratings to previous ratings are not appropriate.