

## *Comments on Lake Biwa brief*

This Brief is well written and provides an extensive account of the history of issues in Lake Biwa and their management. The geographic position of the lake, upstream of major cities has been both a source of tension and a blessing because of the opportunity it provides for funding long-term lake management. However, it has taken a determined, long term effort by the Shiga prefecture to ensure that this funding is made available and that the lake's resources are not simply exploited for the unilateral benefit of those downstream.

The discharge of point sources of pollution has now largely been improved, including through the construction of a large STP. However, the control of diffuse pollution sources, particularly nutrients, has been less successful and the high water quality targets that have been set have not been achieved. This story is well described.

Not all management interventions have been successful. The replanting of fringing reed beds, the compensation of fishermen for the lowered lake level have had limited success and even perverse outcomes. The reasons for this lack of success are provided although not analysed in depth.

The brief also provides a detailed explanation of the rise of a citizen movement, following a red tide event, that was unprecedented in Japan. It is notable that the citizens movement, mobilized to reduce P from detergents, has not been mobilized to reduce diffuse source inputs.

The features that made the management of Lake Biwa successful – the coincidence of the catchment boundary and the prefecture boundary; the existence of wealthy downstream cities; access to good scientific expertise; etc – are well described.

Overall, the brief provides a good balance between the biophysical issues needing management and the administrative/political responses to these issues. It is well written and does not require any major modifications.