# DO NOT EAT ANY BREAM FROM THE DERWENT AND BROWNS RIVER and...



### LIMIT CONSUMPTION of FLATHEAD and OTHER DERWENT-CAUGHT FISH



All fish contain a small amount of mercury - even those from the open ocean. This influences how much you can safely eat. If you eat fish from the Derwent it is best to avoid eating fish from other sources in the same week.

### Fish from the Derwent should not be eaten more than TWICE a week\*.

### Some people should further limit their consumption to ONCE a week\*.

- Pregnant and breastfeeding women and women planning to become pregnant
- Children aged six years and younger

### \*Recommended single serve:

adult - 150 grams, child - 75 grams.

### **About the Derwent Estuary Program**

The Derwent Estuary Program is a regional partnership between the Tasmanian Government, local governments, industries, scientists and the community to restore and promote our estuary. The program was established in 1999 and has been nationally recognised (2010 National River*prize*) for excellence in reducing water pollution, conserving habitats and species, monitoring river health and promoting greater use and enjoyment of the foreshore.

### FOR MORE INFORMATION ON:

SEAFOOD SAFETY

Food Standards Australia New Zealand (FSANZ) **www.foodstandards.gov.au** 

### FISH AND FISHING

Marine Resources Division, Department of Primary Industries Parks Water and Environment (DPIPWE) **www.dpipwe.tas.gov.au** (go to Sea Fishing and Aquaculture)

Inland Fisheries Service www.ifs.tas.gov.au

THE DERWENT Derwent Estuary Program www.derwentestuary.org.au

### Acknowledgements

This work was supported by a Federal Government Caring for our Country grant awarded to the Derwent Estuary Program and in-kind support from TARFish, Inland Fisheries Service, Fishcare, Institute of Marine and Antarctic Studies, Department of Health and Human Services and assistance from Analytical Services Tasmania.

#### Produced and printed October 2011

### Should I Eat Shellfish and Fish from the Derwent?



### **DO NOT EAT ANY SHELLFISH**



## Do not eat shellfish collected from the Derwent estuary, including Ralphs Bay.

Oysters and mussels from the Derwent contain high levels of heavy metals—particularly zinc, lead and cadmium. These are well above safe levels, especially north of the Tasman Bridge and in Ralphs Bay.

A standing public health advisory warns against collecting and eating wild shellfish anywhere in Tasmania. This is because shellfish filter enormous amounts of water and can accumulate high levels of contaminants and toxins that may be present in unmonitored water.

The Department of Health and Human Services (DHHS) recommends that all shellfish be bought from retail outlets, as there is a quality assurance program covering commercially-grown shellfish in Tasmania.

### Fish, mercury and your health

Fish is good for you. It is low in saturated fat, and a great source of protein, iodine and omega-3 fatty acids. However, all fish contain a small amount of mercury - even those from the open ocean. Older, larger fish and those higher up the food chain have higher levels of mercury. Other fish, like salmon, have very low levels. For most people, eating a moderate amount of fish provides health benefits and does not pose a health risk.

In the Derwent estuary, the levels of mercury vary in different fish species. This influences the amount of each species that can be safely eaten. Food Standards Australia New Zealand (FSANZ) provides general advice on safe fish consumption, particularly for pregnant and breastfeeding women and young children who are more sensitive to the effects of mercury. FSANZ has set a maximum level in the Food Standards Code of 0.5 mg/kg of mercury for the sale of most fish.

### **Monitoring and reporting**

The heavy metal levels in oysters, mussels and flathead harvested from the Derwent estuary have been monitored for many years by operators of the Hobart zinc smelter at Lutana.

Mercury levels in flathead have been routinely monitored by the zinc smelter operators and have typically been near or slightly above food safety standards.

In 2007, a pilot survey by the University of Tasmania also identified elevated mercury levels in bream and estuary caught trout. This work has since been expanded by the DEP (with support from a Federal Government Caring for our Country grant) to include other recreationally targeted species including: Australian salmon, whiting, flounder and cod. See DEP website for further information.

### If you go fishing in the Derwent

The health advice in this pamphlet has been issued by Tasmania's Director of Public Health.

The advice is based on long-term monitoring of flathead and shellfish, and studies on the mercury levels in a variety of legally sized fish caught in the Derwent.

#### 1.5 n=41 1.4 1.3 1.2 in fish (mg/kg) 2.0 8 0 1 11 = 0.5 mg/kg Food Standard Code limit n = number of fish tested n=189 n=45 L 0.6 n=23 0.4 n=33 0.3 n=11 n=19 0.2 n=11 0.1 0 Salmon Trout Whiting

### **Management actions**

Recovering from a legacy of historic industry practices, heavy metal levels in the Derwent estuary have fallen significantly in the past 20 years. This has been achieved through cooperation between industry and regulators to improve wastewater treatment, and management of contaminated soils, stormwater and ground water. However, it may take a number of years for heavy metal levels in sediments and seafood to fall to acceptable levels.

#### Mean mercury levels in fish from the Derwent estuary (2006-2011)