Department of Fisheries' Mid West Aquaculture Zone Project

The Department of Fisheries' strategic proposal to establish a Mid West Aquaculture Zone is aimed towards increasing opportunities for finfish aquaculture in Western Australia. The proposed aquaculture zone is an area of State waters selected according to its suitability and compatibility with marine finfish aquaculture. The Department would like to emphasize that the proposed aquaculture zone will not prevent anyone from accessing the area.

Declaration of the Mid West Aquaculture Zone will provide several environmental, social and economic benefits to the Mid West region. A zonal approach allows the Department of Fisheries and the EPA to consider the carrying capacity for finfish aquaculture, and potential cumulative environmental impacts when planning for multiple aquaculture operations. Comprehensive technical and environmental studies will be undertaken to describe the baseline state of the marine environment of the proposed location for the Important environmental factors including hydrodynamics, zone. characteristics and water quality will be measured for management implications. Key marine biological receptors, such as coral, macroalgae, seagrass habitats, and particular species of fauna will be identified and protected through management arrangements. Potential cumulative impacts and environmental management procedures will be determined, before any aquaculture ventures commence.

An ecological model will account for key biological receptors, biodiversity, ecological processes, the influence of aquaculture and the hydrodynamics of the area. Technical studies help ensure that important values of the proposed location and potential effects of aquaculture are identified, well understood and can be managed effectively. The model will provide important information on environmental tolerances to aquaculture.

A zonal approach will establish a management framework for finfish aquaculture within a designated area of up to 3000 ha. An aquaculture zone provides advantages to prospective aquaculture operators, including improved sound environmental management, optimal site selection, streamlined government assessment process, and comprehensive stakeholder engagement. This strategic proposal and its environmental assessment process will streamline Government processes for future proposals within the zone, thereby enhancing aquaculture and job opportunities.

Future aquaculture proponents within the zone will need to refer their project to the EPA as a derived proposal. Derived proposals must define the actual disturbance footprint and demonstrate that associated activities fit within the environmental outcomes that were assessed and approved during the strategic assessment. For example, the scope of a derived proposed could not include the establishment of any land based infrastructure.

Species likely to be considered for aquaculture in the Mid West include, but are not limited to, *Thunnus spp.*, *Argyropomus japonicas*, *Seriola lalandi*, *Pagrus auratus*, and *Coryphaena hippurus*. For a range of species, fish farming technologies and management arrangements tend to be the same, thus the impacts of the operations are expected to be similar. Any future proposal will be required to comply with the policy and procedures outlined in the Zone Management Plan.

Aquaculture operations within the zone will also benefit from an informed site selection. The Department has considered the existing uses and values of the Mid West marine environment and is currently evaluating the suitability of three potential locations for

finfish aquaculture (Figure 1). The site selection process for establishment of the zone seeks to avoid sensitive ecological communities and isolate the zone from sites of high value, in regard to environmental, economic, and social importance. The site selection process was based on multiple criteria analyzed using GIS. Primary site selection criteria for the establishment of the Mid West Aquaculture Zone included, but were not limited to:

- location north-east of an island, sand bank or reef;
- location less than 85 km from Geraldton;
- area being greater than 2000 ha;
- depth of 20-50 meters;
- avoidance of areas of high conservation value (e.g. benthos dominated by coral or seagrass, Reef Observation Areas, and known breeding habitats for cetaceans, sea lions, seabirds, turtles and fish);
- avoidance of prime fishing grounds (area of maximal catch);
- avoidance of historically significant sites e.g. shipwrecks; and,
- avoidance of international shipping routes and major local shipping routes.

Investigation of these factors will inform the management and regulate stock husbandry practices, biosecurity, use of aquaculture technology and risks in regards to any potential environmental impacts and fauna interactions. The proposed potential locations have high levels of flushing to ensure dispersal of nutrients to minimize impacts on water quality.

The Mid West Aquaculture Zone Project is committed to community engagement and will be consulting with stakeholders throughout the project. The Mid West Aquaculture Project has five phases of consultation:

- **Phase one** occurred early 2013, with initial notification of the project's commencement and community engagement on the site selection process.
- Phase two begins late 2013 with communication of results of site evaluation and notification of commencement of field studies.
- **Phase three** begins late 2014 with communication of results from the field and technical studies, and release of a draft Management Plan to key stakeholders.
- **Phase four** is anticipated to commence early 2015 with advertisement of a public comment period on the draft Management Plan.
- **Phase five** is anticipated by late 2015 as part of the launch of the zone, and includes the roll out of the Management Plan.

There will be several opportunities to comment on the key stages of the project, including during various stages of the EPA process. Information on the Mid West Zone Project is available on the Department's website www.fish.wa.gov.au

Stakeholder and interested community members are encouraged to register for project updatesby email. To request further information, or to arrange a meeting, please contact John Eyres, Mid West Aquaculture Zone Project Manager by email john.eyres@fish.wa.gov.au or phone (08) 9482 7377.