



Department of
Primary Industries

Primary Industries Education Foundation Australia Aquaculture in NSW

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NSW DPI Fisheries Aquaculture

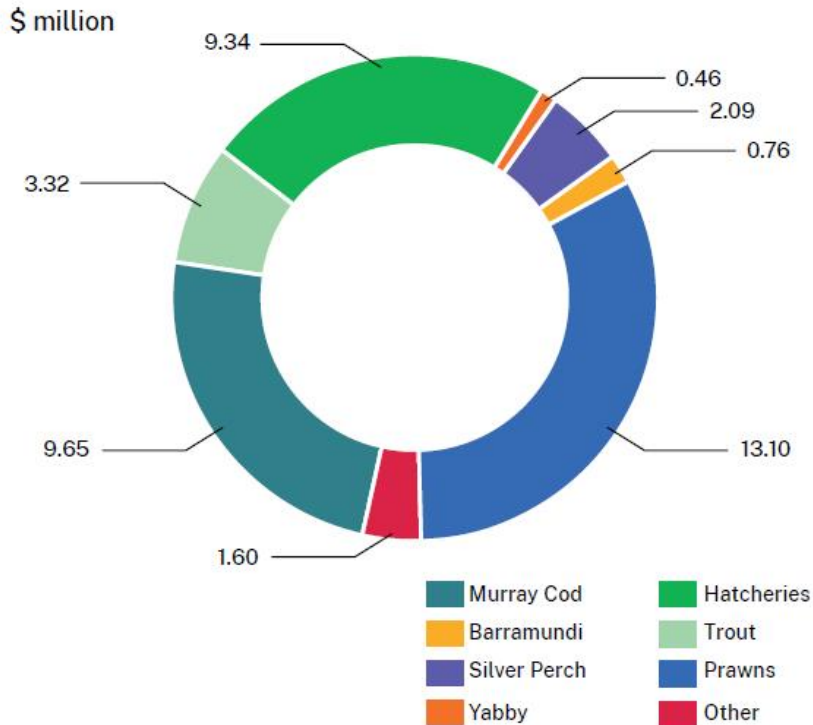
Aquaculture contributes over \$98 million to the NSW economy and provides over 1700 full and part time jobs in regional areas

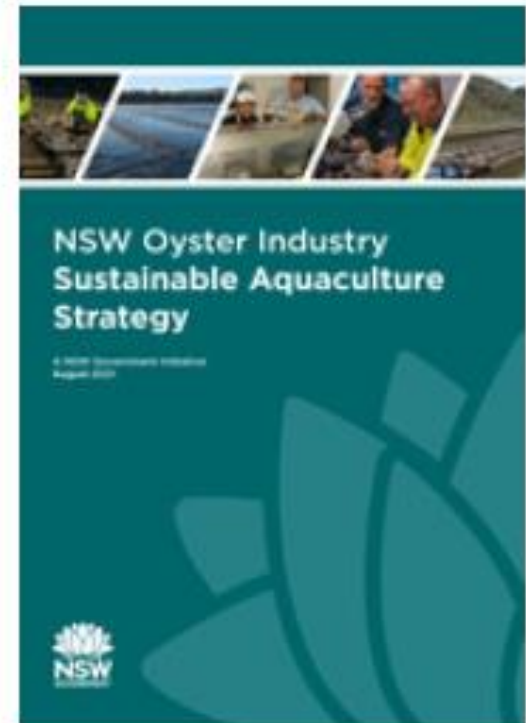
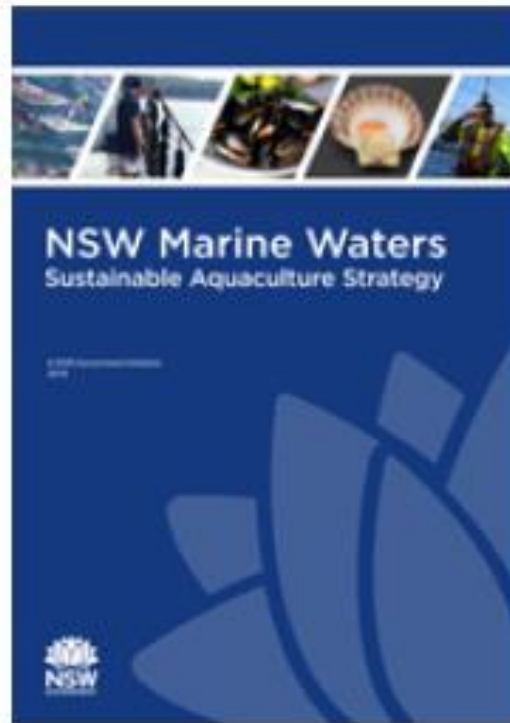
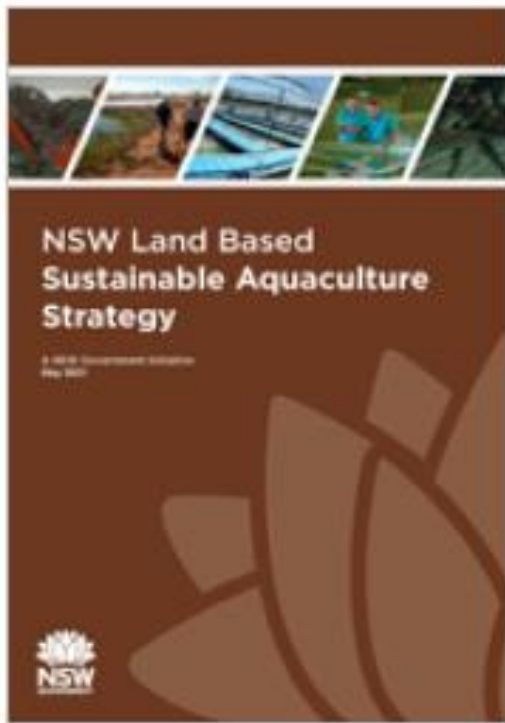


NON OYSTER AQUACULTURE PRODUCTION

Non oyster aquaculture production includes both marine, estuarine and land based farms. The species may be grown in cages, ponds, raceways, tanks or a combination of these. The facility may be small or occupy many hectares in size.

Black Tiger Prawn production was worth \$13.1 million in 2020-21, followed by Murray Cod at \$9.56 million, Hatchery species at \$9.34 million, Trout at \$3.23 million, Silver Perch at \$2.09 million and Barramundi at \$0.76 million.





- ✓ Policy
- ✓ Ecological Sustainable Development
- ✓ Aquaculture permits
- ✓ Lease and farm maintenance
- ✓ Planning and approvals

OYSTER PRODUCTION

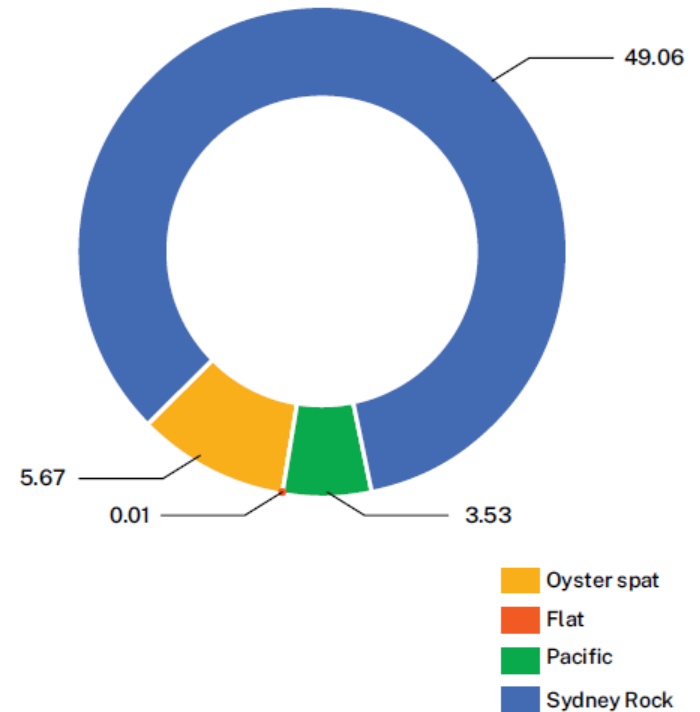
By economic value, oyster production is the main aquaculture activity in NSW. The oyster industry in 2020–2021 was worth \$59 million. The map below illustrates the estuaries used for oyster production in NSW.



VALUE OF THE OYSTER INDUSTRY

The iconic Sydney Rock Oyster is the main species grown in NSW. Relying on a healthy estuarine environment, oyster growers maintain vigilant surveillance of water quality under a world-class food safety program to ensure that quality, healthy products reach consumers.

\$ million



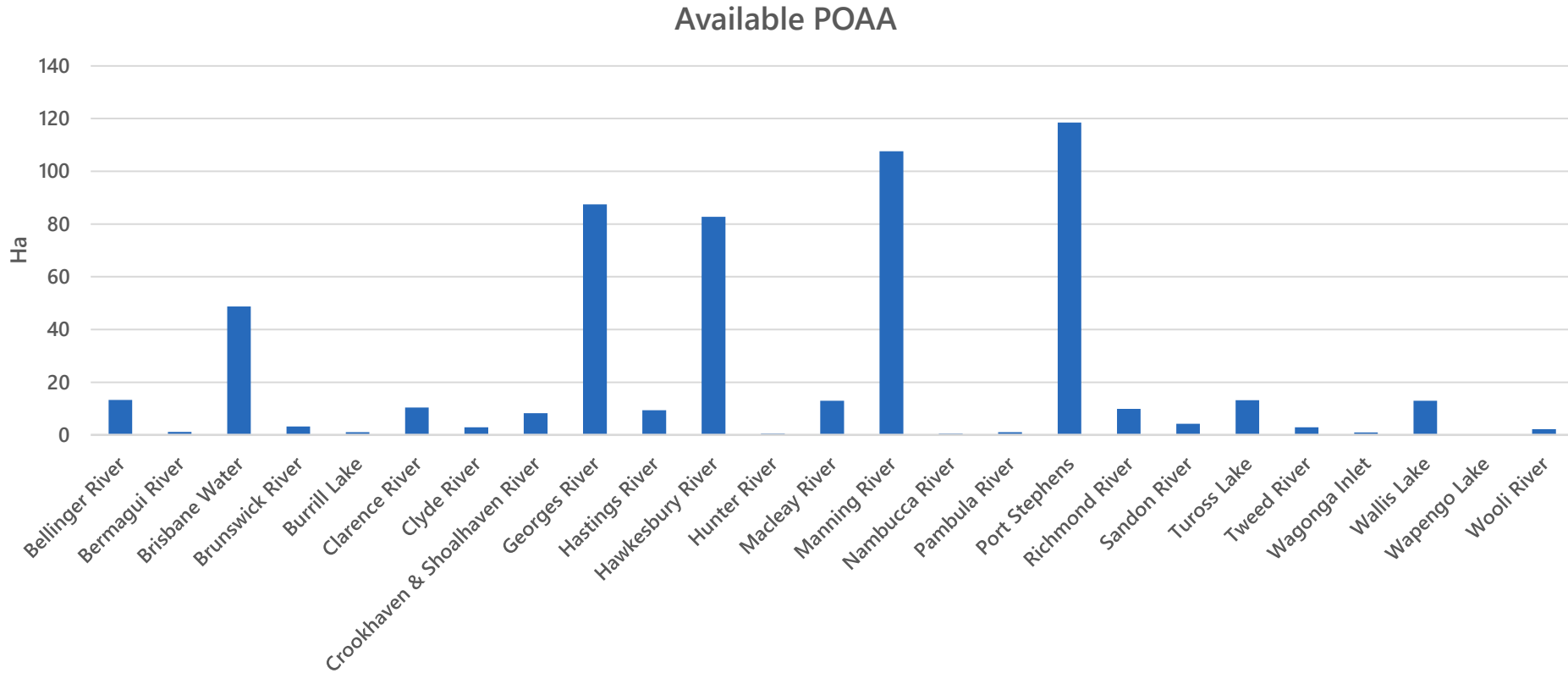
Priority Oyster Aquaculture Areas

Harvest zones

www.dpi.nsw.gov.au/about-us/science-and-research/spatial-data-portal

The screenshot displays the Fisheries NSW Spatial Data Portal interface. At the top, the NSW Government logo and Department of Primary Industries are visible on the left, and the portal title "Fisheries NSW Spatial Data Portal" is centered. A search bar on the right contains the text "OL57/125" and a "Sign in" link. Below the header is a navigation bar with "Map Navigation" and "Tools" tabs. The "Tools" tab is active, showing a toolbar with icons for Quick Start, Identify, Export Image, Print, Line, Point, Styles, Edit, Query, and Extract Data. A "Layers" panel on the left allows filtering layers, with "Supporting Data" expanded to show "Extra Aquaculture Layers" (checked) and "Shellfish Harvest Areas" (checked). Under "Shellfish Harvest Areas", various status categories are listed with corresponding color-coded boxes: Approved (green), Approved - Dual (green), Approved - Split (green), Benched (red), Provisionally Restricted (orange), and Restricted (orange). The main map area shows a satellite view of a coastal region with several oyster aquaculture areas highlighted in different colors (green, orange, red) and labeled: Manilla, Caha Bay, Kimminkong, Patonga Creek, Porto Bay, Murphys Bay, Risys Island, Brinsville, and Hardy Bay. A scale bar at the bottom indicates 3km, and a copyright notice for the Department of Customer Service 2020 is visible.

Priority Oyster Aquaculture Areas



Vacant leases (Class 1) Public Tender



Department of
Primary Industries

Aquaculture Lease Tender FAQs

The following information will assist farmers should they wish to participate in the aquaculture lease tender that NSW DPI runs biannually.

What is an Aquaculture Lease Tender?

NSW DPI offers existing and new lease areas for the purpose of aquaculture via a competitive tender process.

NSW DPI runs the competitive tender process twice a year, in March/April and in September/October.

A competitive process ensures a fair and equal opportunity for all participants and also ensures that returns to the State are maximised.

What do I require in order to participate in the tender process?

To participate in the tender process, you must:

- hold a current aquaculture permit; or
- have previously submitted an application for an aquaculture permit, which has been assessed and approved in principle; or
- have an agreement in place with a current aquaculture permit holder to sublet the lease(s) you intend to tender for.

What do I need to do to participate in the tender process?

To participate in the tender, you must complete and submit **Section E** of the **Request for Tender** document, as per the instructions provided in the Request for Tender document.

Where do I send my tender?

Tenders must be submitted by post or email only.

Post:

Confidential – Tender Aquaculture Leases
TENDER BOX
NSW Department of Primary Industries
Locked Bag 1
NELSON BAY NSW 2315

Email:

Subject line must read "Confidential – Tender Aquaculture Leases".
aquaculture.tenderbox@dpi.nsw.gov.au

All tenders **must** be received by the closing date and time specified in the Request for Tender.

Aquaculture Lease Tender FAQs

How does NSW DPI assess the tenders received for the leases being offered?

An Aquaculture Lease Tender Committee (ALTC) reviews all tenders received before the closing date and time. The conforming tender that offers the highest premium for each lease will be accepted as the successful tender.

What is a conforming tender?

For a tender to be assessed as conforming, a tenderer must:

- comply with the Terms and Conditions of the tender; and
- not be a disqualified person/company from holding an aquaculture permit; and
- not have outstanding debt payable to NSW DPI in relation to any aquaculture lease or permit they hold; and
- not have a poor record of managing one or more other leased areas (e.g. have outstanding clean-up issues on a terminated lease previously held by the tenderer).

If my tender for a lease is successful, am I guaranteed that lease area?

Not necessarily. A successful tenderer may need to seek other consents / approvals for a proposed lease that they have successfully tendered for, e.g. Landowner's Consent and/or Council approval through a Development Application process for a new lease area.

NSW DPI does not guarantee that any consent or approval will be granted by other agencies / authorities.

Further information on the consents / approvals that may be required for each lease being offered can be found in **Section B** of the Request for Tender.

Should I treat the details of my tender as confidential?

Absolutely. Tender participants should not discuss the details of their tender with other potential tenderers. Sharing tender information with other tenderers compromises the integrity of the tender process and is discouraged by NSW DPI.

For more information

Visit NSW DPI's website at www.dpi.nsw.gov.au/fishing/aquaculture/aquaculture-leases.

Your Reference number INT18/161390

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (April 2019). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

Sydney Rock Oyster Breeding Program

- Advantages of family based breeding:
 - genetic information
(compared to mass-selection)
 - increase genetic gains
(compared to mass-selection)
 - estimate gains in heritable traits
 - multi-trait selection
 - control level of inbreeding
- Goal: A population of SROs that gets better over time
 - Decrease the cost of production (via disease resistance, superior growth and uniformity)
 - Increase product quality traits (via improved meat condition and shell shape)



- Input
 - Load Files
 - Input File Format
- Reports
- System
- Tables

Loaded Files

Choose File Type

All

Reference Loads

- Input Trait Descriptor
- Define Site
- Define Genetic Groups

Fertilisation

- Define Fertilisations
- Input Broodstock Sample
- Input Founder Genetic Groups

Trial Deployment

- Define Progeny Test
- Define Unit

Data Inputs

- Input Unit Measurement
- Input Individual Measurement

Recently Loaded Files

FILENAME	DOCUMENT
2019_Measure_Individual_Site_2_20...	Download
SRO_QX_H2_All_Trials_2021-06-08	Download
Alias_QX_All_Trials_2021-06-04.csv	Download
Job_QX_All_Trials_2021-06-04.csv	Download
Founder_Genetic_Group_Richmond_03.csv	Download
Genetic_Groups_Richmond_River_...	Download
SRO_QX_H2_20170402_2021-06-0...	Download
Alias_QX_Indiv_20170402.csv	Download
Job_QX_Indiv_20170402.csv	Download
2019_Measure_Unit_Site_4_2021-0...	Download
2019_Define_Unit_Site_6_2021-04-...	Download
2019_Progeny_Test_Site_6_2021-04-15 (1).csv	571 Define_Progeny_Test KYLE 22-APR-2021 Download

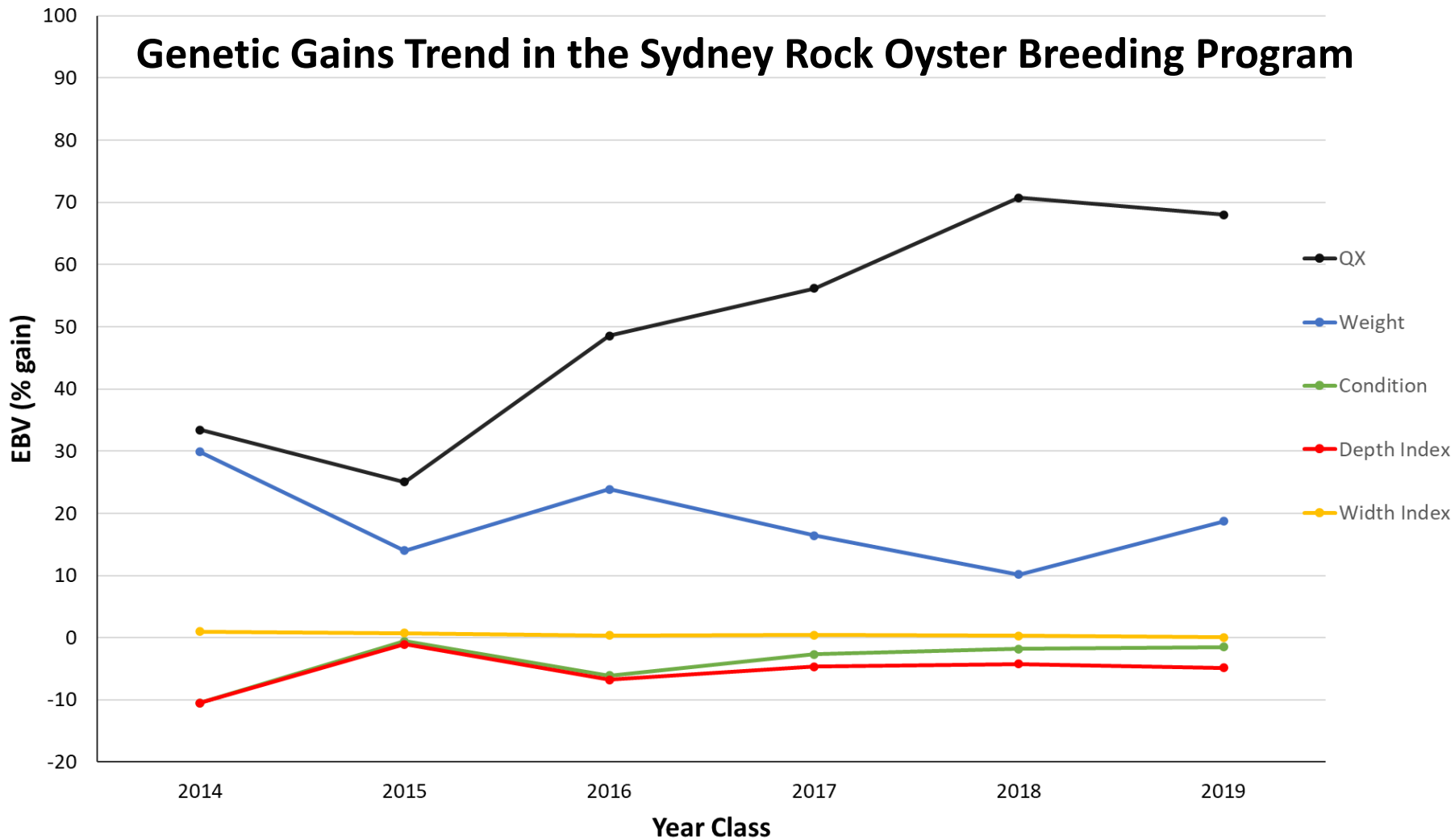
Commercial Traits:

QX disease survival

Whole Weight

Condition

Genetic Gains Trend in the Sydney Rock Oyster Breeding Program

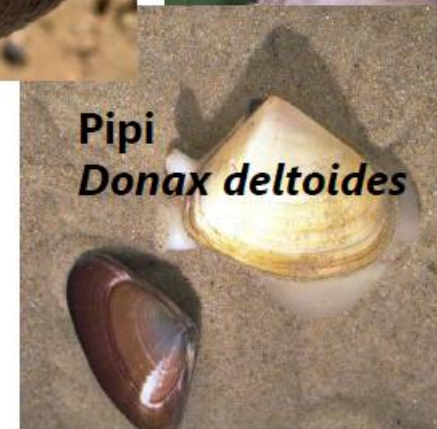
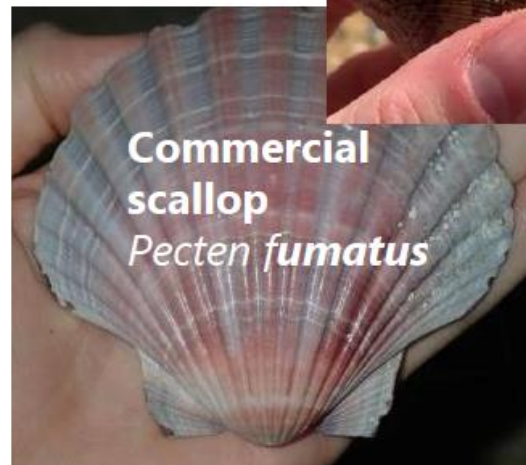


Alternative species

Review of Environmental Factors - access pathway

Existing lease infrastructure

Native to the area



Innovation





AQUACULTURE FARMS

The location of aquaculture farms is dictated primarily by the environmental constraints of the species being grown. Some species such as Silver Perch and Yabbies are grown widely across the state, while prawns are grown on the far north coast, mussels in Jervis and Twofold bays, Trout on the southern and northern slopes and Murray Cod in the Riverina. Hatcheries that produce fingerlings for aquaculture farms, stocking of farm dams and aquarium fish are also located throughout NSW.

Freshwater fish and hatcheries in NSW

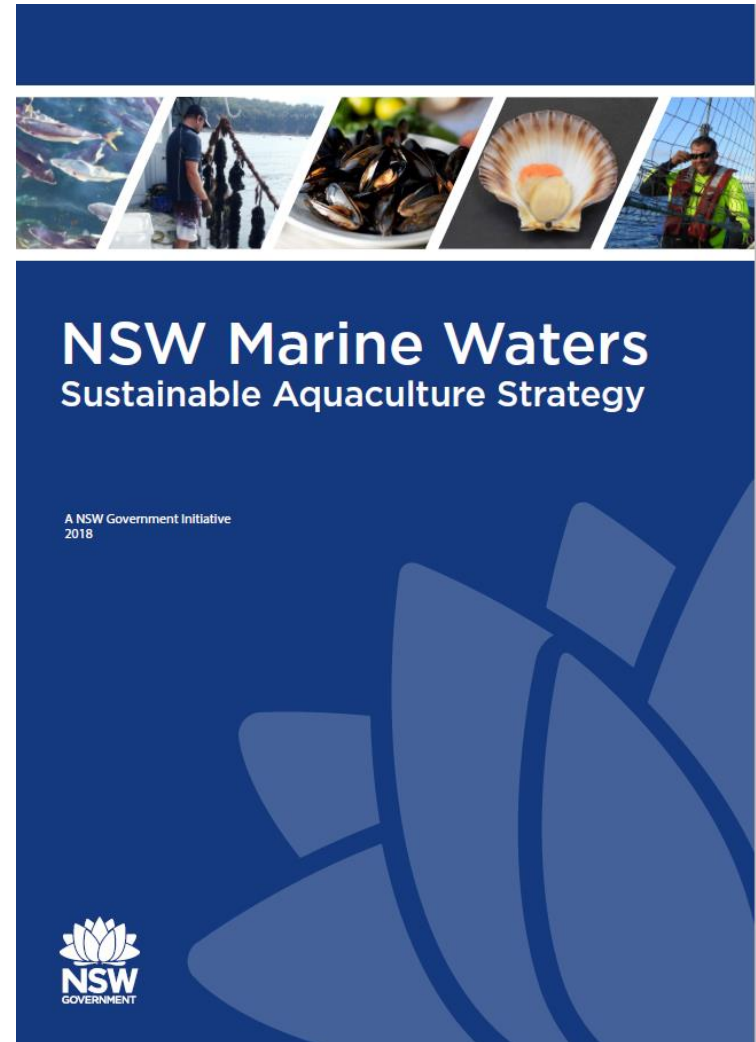


Vacant leases (Class 2)

Marine leases are also acquired through public tender

Currently in NSW marine waters:

- Twofold Bay: Eden Seafarms (37.5 ha) and South Coast Mariculture (12 ha)
- Jervis Bay: South Coast Mariculture (50 ha)
- Port Stephens: NSW DPI MARL (60 ha)
- Port Stephens: Huon Aquaculture (62 ha) (wrapping up)



Other research

Nutrition

- Commercial feed validation for Australian Aquafeed manufacturers
- Industry partner for the ARC Training Centre for Facilitated Advancement of Australia's Bioactives (FAAB) - Facilitated Advancement of Australia's Bioactives
- Evaluating nanobubble technology in aquaculture

Developing and improving hatchery and nursery techniques for oysters

- Sydney Rock, Pacific, Pearl and Native Oysters) and enables established aquaculture businesses to diversify in the species that they culture..
- Researching the impacts of human activities and climate change on oysters
- Transforming Australian shellfish safety and disease response through improved regulatory practices and reduced losses

Propagule supply for algal aquaculture

This project, in collaboration with University of Technology Sydney, commenced in 2022 and is investigating the techniques to generate seedstock required for seaweed aquaculture

Fish production

- Current research efforts are focused on improving methods for hatchery production of mulloway, Australian bass, yellowtail kingfish and dusky flathead for stock enhancement.

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**[www.dpi.nsw.gov.au/fishing/aquaculture/permit
-holder-informationholder information](http://www.dpi.nsw.gov.au/fishing/aquaculture/permit-holder-informationholder-information)**