

A collaborative approach to Invasive Marine Pest Monitoring in WA Ports

State-Wide Array Surveillance Program (SWASP)



Department of
**Primary Industries and
Regional Development**



Invasive Marine Species



Invasive marine species (IMS) are **marine plants** or **animals** that are **not native** to Australia but have been introduced by **human activities**.

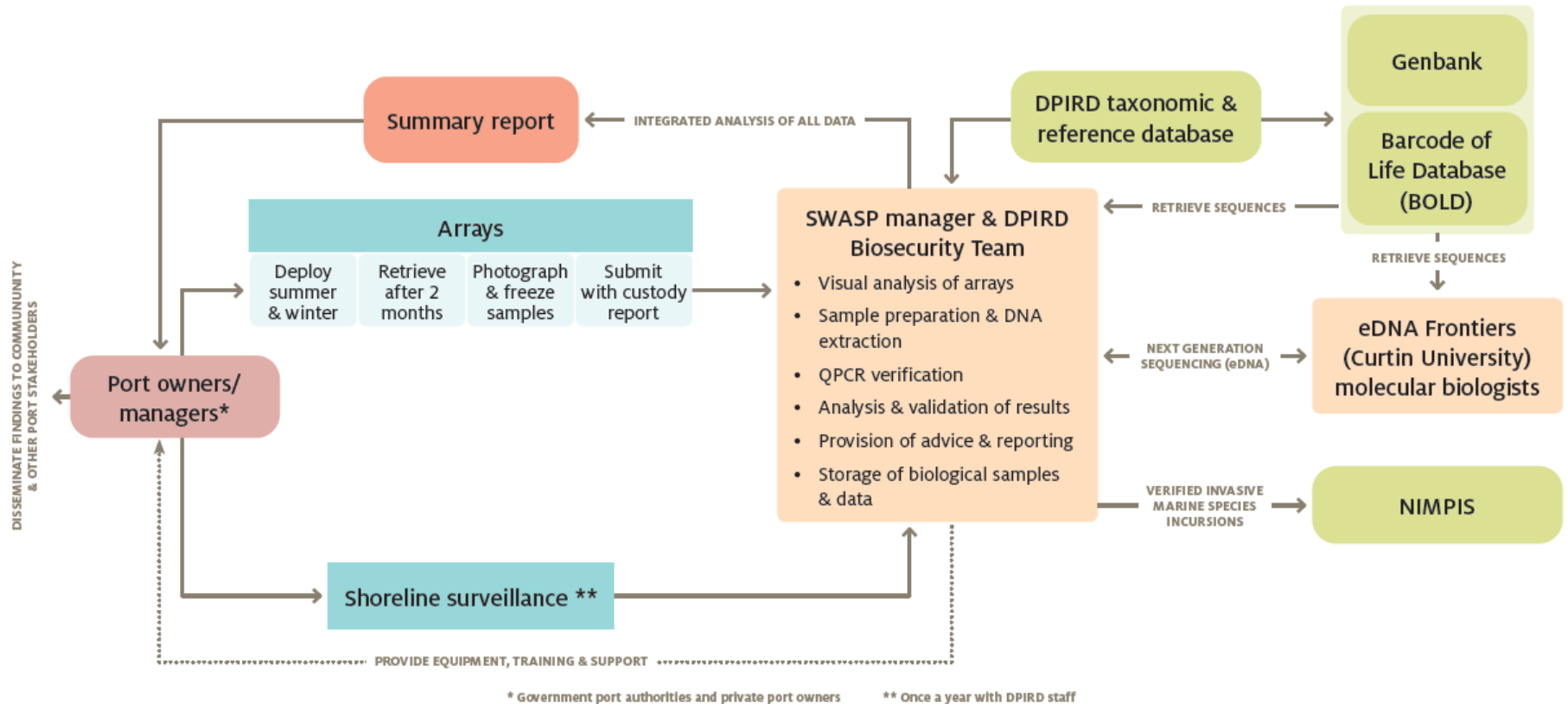
IMS have the potential to significantly impact marine industries, aquaculture and local environments.

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A GLIMPSE OF THE MAKING GENERAL SURVEILLANCE WORK PROJECT FINDINGS State-Wide Array Surveillance Program (SWASP)

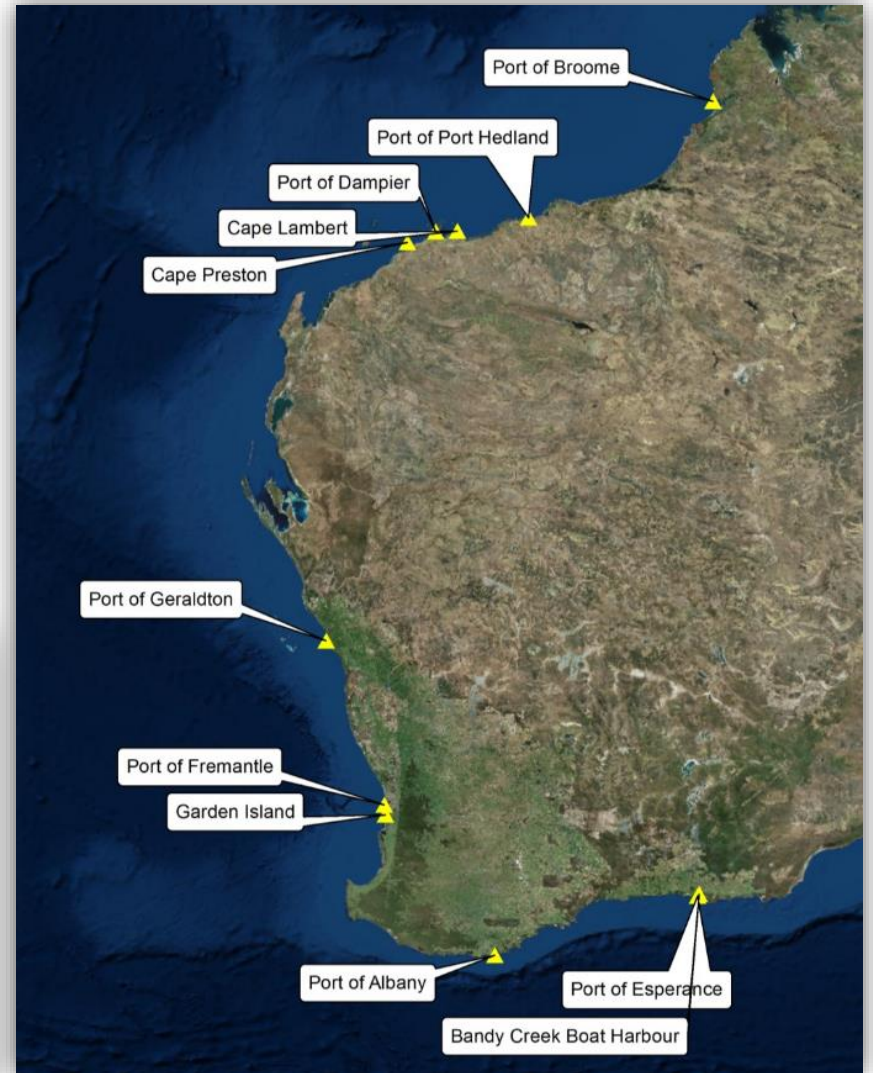
The data flow process



Shining success ...

Since its establishment in just 3 ports, the SWASP program has collaboratively adapted, evolved, innovated and grown into an award-winning biosecurity surveillance program in 11 ports across the state. It won the WA Golden Gecko Award for environmental excellence (2018), Australian Biosecurity Award (2019) and an Institute of Public Administration Australia Achievement Award (2020). However, the creation of a strong network of government regulators, port authorities and the general public who are now aware and involved in protecting WA from invasive marine pests, is valued as a greater achievement.

Setting a new standard for Marine Biosecurity



State-Wide Array Surveillance Program (SWASP)

SWASP has succeeded in providing robust, coordinated, collaborative and consistent surveillance of potential marine pests within ports across Western Australia (WA), filling an important gap in the existing marine biosecurity surveillance for the state.

Successes of the program:

- Collaborative
- Consistent across the state
- Effective in early detection



TRUST IS KEY TO SUCCESSFUL COLLABORATION

- There is strong trust between DPIRD staff and the ports
- It takes time and effort to build up trust
- Annual DPIRD visits to the ports helps to maintain the relationships and two-way communication
- Trust enables a strong collaboration between the regulator (DPIRD) and the ports and opens opportunities for collaboration on other issues
- Ports like to feel connected and part of a larger program



SWASP PROVIDES MORE THAN BIOSECURITY SURVEILLANCE

- Strong collaboration supports trialling new innovations
- Molecular ID enabled biodiversity data (not just species presence/absence) to be collected
- Ports utilise community interest in biodiversity information to increase engagement with them
- Community engagement increases general knowledge and awareness of invasive species



INNOVATION HAS ITS CHALLENGES

- Get the program up and running, then 'iron out the bugs'. (e.g. *Adapt surveillance design and equipment*)
- Change is initiated by ports identifying a problem or DPIRD identifying an opportunity
- Change and innovation presents new challenges so SWASP needs to be adaptable
- Because the ports trust DPIRD they accept the challenge

2008

Initial array trial in WA



2013

EWS implemented in 6 ports



2015

Added eDNA identification to taxonomic methods



2017

SWASP implemented in 11 ports



2018

Won WA Golden Gecko Award



2020

QLD implemented SWASP in 5 pilot ports



2010

'Early Warning System' (EWS) program established in 3 ports



2015

EWS implemented in 10 ports



2016

EWS transitioned to the SWASP program



2017

Presented program to Commonwealth Marine Pest Sectorial Committee



2019

Won Australian Biosecurity Award



2020

Won Institute of Public Administration Australia Achievement Award