

Singapore Celebrate our Shores 2018 . 14 October 2017 . Singapore Maritime
Gallery
Collaborative Note-taking Document

Hi everybody! This is a document that we will all use to take notes on each of the session during the workshop. It will serve as the final output of our workshop to put into words what we hope to do for our shores in 2018.

Sharing by Ria

What are spring tides?

Ans: That's when there are super high or super low tide just after a new or full moon.

<https://oceanservice.noaa.gov/facts/springtide.html> (Thank you!)

20 years to make Sister's Island Marine Park!

-get as many groups as possible to work together

IYOR

-celebrating all shores

-youth taking the lead

-singapore blue plan 2018

-consist of 32 groups!

Connectivity: All our ecosystems are connected! (Eg. Mangroves, reefs, rocky shores)

Threats:

- balloons (disposal, mass release, etc)
- Marine trash (coastal)
 - MPA helps with management of trash from ships
 - Where do the coastal trash come from?
- Unsustainable fishing methods (driftnet, traps, etc)
- Boat strikes
- Coral bleaching
- Oil spill
- Competition for land use
- Land reclamation!

Good management of water - clean waters = lots of marine biodiversity

Sister's Island is where all the small corals come from! It is circulated to all the other shores.

Tour of Singapore Maritime Gallery













<https://www.marinetraffic.com/>

-Incentivise ships to reduce pollution

-ships is one of the lowest pollution forms of transport.

What's your issue?

- Education (1)
- Threats (6)
 - Marine trash
 - Pollution
 - Destructive fishing
 - Coastal development
- Solution
- Population
- Marine trash (2)
- Enforcement (3)
- Development (5)
 - Land use
 - Planning
 - Land reclamation
- Sustainable food security (7)
- Policy/framework (4)
- Pollution (8)
- Climate change
- Engagement
 - Government
 - NGO
 - Enterprise
 - media
- Festival
 - Calendar for environmental events
- Microplastics/impacts

EDUCATION #1		1
THREATS #6		6
MARINE TRASH #2		2
ENFORCEMENT #3		3
DEVELOPMENT/PLANNING LAND USE #5		5
SUSTAINABLE FOOD SECURITY #7		7
CLIMATE CHANGE		3
POLLUTION #8		8
POLICY / POLICY FRAMEWORK #4		4
FESTIVAL (1 OR 18)		1
WHO TO ENGAGE		5
MICRO PLASTICS/IMPACTS		5

What can we do?

Things to think about:

- What aspect of your issue do you want to address?
- What is your message?
- Who is your target audience?
- What outcome do you hope to achieve?
- How can we achieve it?

Group 1

Issue: **Education**

Ideas:

Intertidal walks to bring public closer to our shores.

Hold FOB at different parts of Singapore, more accessible

Roving/moving exhibits

Social media/videos

Advertisements between shows on tv/youtube

Possible Target audience:

Schools/youth

General public → supermarkets (source of plastic bags), malls (frequently visited)

Families

Message:

Outcome:

To instil the knowledge and importance of conserving nature.

Awareness on marine wildlife, biodiversity on our shores Greater awareness.

Solutions:

General public:

To drive actions: TV/YouTube adverts about not taking extra plastic bags when shopping, bringing your own food containers for takeaways, also going further into briefly showing some consequences through simple animation. This would target the general public in altering their lifestyle choices.

- Social media seems to be effective
- Increase awareness: roaming exhibits of organisms in Singapore and pictures or exhibits of dead whale carcasses revealing plastic cups in their intestines. These exhibits could be held in mall/supermarkets which are main avenues which people consume these non-biodegradable trash

Schools: IYOR can act as a middleman/convening party between specialized environmental organisations and schools to call up

Roleplay:

Aspect: raising awareness

Message: singapore has marine biodiversity and our actions do have an impact, whether negative or positive on them

Target audience: general public

Outcome hope to achieve:

Group 2

Issue: **Marine Trash**

- Sources of trash: Kelongs, terrestrial trash (litter), bum boat drivers
- Macro-level ground work to be done: Find out sources of marine trash and types of trash.
- Potential solutions:
 - a. [POLICY LEVEL] Ban single-use disposables and dapao boxes in Singapore → Put pressure on the government i.e. SEC, NEA; Blog about it (spread social influence)
 - b. [POLICY LEVEL] Introduction of biodegradable materials for one-use disposables → pioneering alternative sources of packaging
Example: Waffle brand *Bruxel* used edible packaging to wrap their waffles at a music festival in Ubud, Bali
 - c. [EDUCATION; SCHOOLS; CORPORATIONS] Coastal clean ups to get people started thinking about the issues related to marine trash.
 - Work with NEA to reach out to schools to organise clean ups
 - Period
June: World Environment Day
Sep: ICCS
Nov: Clean & Green Month Singapore (by NEA)
 - d. [EDUCATION] Organise an annual nation-wide festival (can coincide with Clean & Green Month SG) to clean up their trash — make it a social thing so people can get incentivised to clear up after themselves (social pressure)
 - e. [COMMUNITY] Make a page for declarations for people to pledge to be zero waste (has to be bigger than Journey to Zero Waste Life in Singapore)
 - f. [COMMUNITY] Art project/installation to help people visualise the amount of trash that gets trapped in a whale's belly. Help people visualise the circle of life -> what marine animals consume can also end up in our bellies.
 - g. [FESTIVAL] Attach to Festival of Biodiversity, to reach out to public and educate people about the issues related to marine trash and what they can do about it i.e. zero-waste lifestyle, join coastal clean ups.

Group 3

Issue: **Enforcement**

Needs to go hand in hand with education, alignment of interests. How can community be empowered or motivated to police acts by their members? Pairing with messaging that appeals to reason or self interest, e.g. marine park, responsible fishing, marine litter. Role of continuous education to get people to understand impact of their actions and policing others in the community.

How to get out key message? Also language, age and cultural barriers.

Campaign fatigue versus more subtle or persuasive messages.

E.g. Charging for plastic bags and providing alternatives.

Group 4

Issue: **Policy / Framework**

Ideas...

- Legal framework applicable to all coastal and marine environment
- EIA framework
- WTKnow: Stakeholders in policy making
 - Awareness
 - Acceptance
 - Action
- Involvement of corporate companies
- Engagement with community in policy/ framework crafting, decision making

What activities can be organised in 2018:

- Leverage on sustainability report (for listed companies)
 - Create networking opportunities for companies to learn from each other
 - Corporate Social Responsibility (CSR)
- Singapore Blue Plan Review
 - Involve blue community and build trust

Group 5

Issue: **Development / Planning Land Use**

What threat does it pose to the shore?

Assessments of the threats

URA: awareness of development, meetings and proper representatives from organisations to work on a Long term basis

AWARENESS: Singaporeans are not aware of the masterplan, eg future developments surrounding Pulau hantu and islands surrounding mainland Singapore - what can people do with that knowledge?

Masterplan not published to the public openly: environmental events, incorporation of public agencies

Active participation of schools; educate on the islands and engage them on the possible land use on them

Town council: grassroots and smaller scale planning

Target audience: anyone and everyone?

Seringgan

Raise awareness: make people care for it, and show that the government care for it

Solutions: working with government, and not against it

Events, national goals, engagement

Pulau hantu, dive site, wildlife

Solution/ role play (how to achieve it)

Target audience: URA officer and the public

Target sites: After sisters island, 3 military islands, Pulau hantu

Solution: Intertidal walks (same as Ubin) to show the rich biodiversity, convince them that they should not be included for development within the masterplan
Photo exhibition to showcase marine biodiversity
Collect data to show public interest

Group 7

Issue: **Sustainable Food Security**

Challenges? Hard to change eating habits

What aspect of your issue do you want to address?

- Meat/seafood consumption (the way we consume our food)
- Game fishing (no regulations)
- Overfishing

What is your message?

- How meat/seafood intake affects our reefs

Who is your target audience?

- Consumers

How can we achieve it in 2018 through IYOR?

- Propose a tax for meat and seafood through writing paper
- Encourage plant-based diets through all institutions
- Education through schools (meat-free Mondays) and members of public
- Finding out where our seafood comes from (more supply chain transparency, pushing for)

Group 8

Issue: **Pollution**

Main Issue : Trash that ends up on our shores

-styrofoam (food containers)

-plastic waste (cups, straws, cigarette butts filters)

-fishing nets

-People don't realise the chain of events that occur for the trash to be in our waters

-Things in recycling bins are typically not trash that **can** be recycled

-everyone must be responsible for the environment

-What happens to our trash when we throw it away?

-How do we reduce our plastic footprint?

-Spread the word to reduce waste & recycle

-Target Audience : General public

-What do we hope to achieve : Recycling education

-Are there any monetary benefits to be gained by reducing waste/recycling?

Problem: They are polluting but do not know about it -> lack of awareness of consequences of misplacing their trash (ECONOMIC COSTS ENVIRONMENTAL COSTS -> REEFS ANIMALS -> wide spread problem so

eg. litter at beaches that may get washed up by the currents that will affect

Target Audience: General Public (many people that can be educated -> increase receptiveness of our solution) why most people

Rationale: Identify misconceptions that general public have about where their trash goes and then correct them and spread this knowledge to educate general

public to

Educate where the trash goes so that we get to the end point recycle more know how to

How can we achieve it?

-Social Media Campaign (2 main features) Periodic videos updated weekly spread on Facebook, instagram, twitter, environmental websites

- 1) Animation to show how trash travels to our oceans stop motions
- 2) Street interviews (video them and use clips on social media)

Where to interview? Beaches where any litter

1. What happens to the trash in the bin?
2. What happens to the trash outside the bin?
3. What happens to trash that is litter?
4. How long do you think would that trash last without going to the incinerator?

If they answer wrongly, correct them and use of infographics in the video

-Use social media as outreach to spread to more people

-adopt/innovate better recycling technology

-Educate on how to recycle (e.g. plastic contaminated with food need to be washed)

-Outreach across the Causeway to Malaysia/Johor to see if they have groups that are interested in collaboration to save our shores

-Need to see result/impact and publicise it so that public will be motivated to continue

-Have an NGO (voluntary) to collect waste from fish farms

What I pledge to do / offer

November - More workshops for Leafmonkey Workshop on issues relating to our shores

Jose - Team Seagrass ; Articles about shore events on Straits Times

Xiang Tian - LepakInSG workshops ; calendar to publicise your environmental events

Natalie - Raffles Ecolit - books about seagrass and shore

Pei Yan - Sisters Island Marine Park

Sumita - ACRES - student projects for meat free monday in their schools / [Sign the position paper by Animal Allies](#)

Christina / Sunshine - International day of biological diversity

Frances - [Little Green Men](#) ; publicise events on Facebook page and articles on blog

Jia Yin- share more about Singapore shores w preschool children; possibly start writing a storybook on our reefs if can find an illustrator.

Ideas generated in the first breakout session

Image of the actual comments: <https://flic.kr/p/YkJb3y>

Education

Education

Awareness of our rich biodiversity in Singapore

Lack of interest in general public about the wealth of ecosystems in Singapore

Lack of awareness

Threats

Marine trash

Fish traps

Plastic

Oil pollution

Habitat destruction

Illegal and overfishing

Rising sea temperatures

Excess nutrients in the water

Solutions

Reduce carbon footprint

Interdisciplinary cooperation

Sustainable eco-tourism

Bad bad fish farming

Sustainable seafood

No single use plastic

Image of the actual comments: <https://flic.kr/p/YpcTVZ>

Marine trash

Plastic in our salt

Abandoned fishing nets

Trash

Marine trash

Microplastics

Plastic over-reliance

Changing our habits on the use of plastic

Polystyrene food containers

Education

Recycling education

Lack of awareness of the biodiversity of our shores

Reef conservation

Wider coastal cleanup campaign

Reefwatch

Less “someone else will do it attitude”
General lack of awareness/interest

Development

Rising population leads to land reclamation
Land reclamation
Dredging

Enforcement

Food supply ethos and tracking
New food growing technology encroaching into reef areas
Ban shark fin by govt (imports)
More ships leads to higher risk of oil spills
Wildlife trafficking for aquarium
Lack of enforcement
Consumption of endangered species, important species
Invasive box jellyfish increasing in our neighbour's waters will create hostile diving environment

Image of actual comments: <https://flic.kr/p/YpcSYZ>

Education: awareness, tours, campaigns

More tours/visits to surrounding islands (for public, not very accessible now)
Science communications
Increase public awareness and education
Education of Singaporeans - we have so much marine biodiversity!
Public environmental storybooks for preschoolers
Lack of visiting, apathy within general populace
Awareness on native marine life
Tours to see marine life and bigger marine animals (e.g., dolphin tours)
Intertidal walks for the public.

Policy: regulation, government

Town Council's enforcement and regulation on coastal projects
Lack of transboundary co-op for global issues
Policy changes to protect marine issues
SG initiative on coral protection Act
Chek Jawa to be gazetted marine nature reserve.
Government support humans needs versus wildlife
Fish farm controls by products, trash
EIA for hotels to build on coastal zones
Game fishing regulations

Pollution

Marine plastics
Ban balloon releases

Reduce plastic waste - move away from over emphasis on recycling
Waste from rivers into the ocean
Plastic bags in the supermarket, need to educate the public
Single use plastics for dine-in
Conservation of biodiversity
No mass release (mercy release) into our habitats

Festival

Celebrating our reefs' resilience
IYOR festival
IYOR 2018 community celebrate marine
IYOR calendar of events 2018
Environmental calendar for environmental lovers to check out and participate in

Engaging

Engaging govt, NGOs, Enterprise
IYOR fundingL govt and private
Media

Image of actual comments: <https://flic.kr/p/YkJavG>

Education

Lack of awareness of marine biodiversity in Singapore
Building ecological awareness and literacy
Marine littering, culture and mindset
Encouraging citizen action
Addressing ignorance and indifference
Lack of recycling culture

Pollution

Trash from fish farms
Abandoned nets
Chemical pollution
Littering
Plastics

Sustainable food security

Sustainable seafood
Sustainable livelihood for sea people

Policy

Land reclamation
Mangrove protection
Environmental impact assessments
Integrated Coastal Management
Coastal and Marine EIA

Transboundary cooperation and collaboration
Spreading influence to neighbours
Marine ecotourism
Funding for marine research

Climate Change & Connectivity

Rising sea levels
Deep sea dredging
Boat strikes

Image of actual comments: <https://flic.kr/p/ZqtT9a>

Framework and Policy

Lack of policy and legal protection of marine habitats
Lack of government protection
Lack of corporate protection
Products are not priced based on environmental impacts
Habitat improvement, shoreline restoration, coral planting

Threats

Loss of species
Landfills
Land reclamation
Litter in the ocean particularly plastics
Livestock
Stop single use plastics
Removal of mangrove swamps to make way for land reclamation
Oil spills
Plastic waste
Pollution
Styrofoam food boxes
Mass fish deaths
Better fish farming practices

Education

Sunscreen chemicals affecting PH of waters
Importance of marine life/ecosystems
Awareness of marine life
Nature-Society relations - how people view the environment
Lack of public interest
Involvement of citizens in conservation efforts
Start educating when young
Feeling at a loss of what to do
Touching marine life for selfies
Humans stepping on corals confused for rocks. What are corals?

Image of the comments: <https://flic.kr/p/YkJa1y>

Public awareness/education

Public engagement, get youths involved

Marine Park (Sisters' Island): mooring for boats, open to the public (diving pros), for non-divers (snorkelling).

Expand our marine park

Public outreach education on protection of reefs and coastline

Marine environment relation to quality of life, economy, food, ecosystem, living

Awareness of Singaporeans of marine and the sea

Singapore

Singapore's nature scene fairly niche - knowledge about marine habitats are obscure.

Environmental literacy amongst Singaporeans

Impacts

Micro plastics in the seas

Micro plastics

Micro plastics

Oil spill

Rubbish

Plastics

Know what we don't know

Aware, Accept, Apply

Plans/Land use

Land reclamation due to land shortage

How to balance conservation with development

Fragmentation of habitats/ecosystems

More private-government engagement

Land reclamation

Balance government wishes with environmental wishes

Feedback form results

- This workshop was useful (38) ; in between (2) ; a waste of time (1)
- My key concerns were addressed (37) ; in between (2) ; ignored (0) ; no answer (2)
- Chance to talk enough (35) ; in between (1) ; not enough (3)
- Time allocated too short (4) ; too long (7) ; just nice (28)
- Group size too big (3) ; too small (1) ; just nice (36)

Comments on venue

- Perfect
- Great (x6)
- Good (x3)
- Nice
- OK
- Comfortable
- Symbolic
- Maritime Gallery was awesome! Great place!
- The guides for the tour were very nice and informative!
- Great venue for discussion with its peaceful atmosphere.
- Spacious and conducive.
- Appropriate!
- Perhaps tables and places to draw mindmaps would be helpful and conducive!
- Nice venue, a little disruptive when public comes around
- A bit hard to hear each other.
- No wifi :-(
- Fruits were nice too!

What was your most useful takeaway?

- We can all play a part in representing IYOR 2018
- The discussions.
- Networking
- There are so many diverse stakeholders who care!
- Livestock causes a detrimental impact on the environment
- The contacts of people who are interested.
- Positive group of people. Hope for the future!
- Inspiring!
- Focus on an issue in 2018 and give it 100%.
- New insights and meeting people in the field.
- Getting to know what others do and how to synergise.
- Future plans for IYOR 2018.
- Workshop has inspired lots of people! WOW!
- Got the 'Big Data' from this event.

Any outstanding concerns that still need to be addressed?

- Biodiversity impact from coastal developments

- Interactive workshop

Other comments and suggestions

- More focused action (role play is not one of them).