



AQUACROSS Faial–Pico Channel Stakeholder Workshop #2

The Faial–Pico Channel: Future stakeholder management of the Marine Protected Area

Proceedings from the second AQUACROSS Faial–Pico Channel Workshop
23 May 2018, Hotel do Canal, Horta, Azores



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1 Key Messages

Stakeholder-based management of the Faial-Pico Channel Marine Protected Area (MPA)

Stakeholders would like to have greater say in managing the Faial-Pico Channel, whether that is in the form of informal consultation, input on specific policies, or a formal Stakeholder Advisory Group. Participants at the workshop recommended the following:

- **Role/responsibilities:** A stakeholder advisory group could contribute to **monitoring/evaluation, proposing solutions, and promoting multiple-use and synergies.**
- **Expected benefit:** **Reduced conflict, improved knowledge, and increased environmental protection.**
- **Potential barriers:** **Lack of official recognition for stakeholders, poor communication, low enforcement/compliance with regulations.**

Towards stakeholder-based management of the Faial-Pico Channel MPA: next steps

Workshop participants identified three concrete steps towards greater stakeholder participation:

1. Define an official MPA **Management Plan for the Channel**
2. Clearly **define the role and responsibility** of stakeholder participatory management in the Channel
3. Identify **representative stakeholders**

Future management measures: Stakeholder priorities

Workshop participants selected the following measures as their top priorities for sustainably managing the Faial-Pico Channel in the future:

Fisheries

- Simplify and better communicate existing fisheries legislation
- Invest in awareness and education related to fisheries legislation
- Prohibit certain fishing techniques/gears

Monitoring/enforcement

- Coordinate all government department monitoring/enforcement
- Fund long-term biodiversity monitoring in the Channel
- Increase fines/enforcement for illegal fishing (recreational/commercial)

Sustainable tourism

- Apply a "tourist tax" for the protection of biodiversity
- Develop specific conservation programme targeting specific species/habitats
- Invest in the training of tourism-related people in relation to marine biodiversity

1 Introduction

On the 23rd of May, 2018, AQUACROSS¹ hosted a second Faial–Pico Channel workshop in Horta, Faial Island, Azores. The workshop (see [workshop agenda](#)) brought together [18 local stakeholders](#), including tourism, fishing, and environmental representatives, as well as scientists and policy-makers.

This meeting had two key aims, which arose at a first AQUACROSS Azores Workshop,² in October 2017:

1. To develop a concrete plan for **stakeholder-based management** of the Faial–Pico Channel MPA.
2. To discuss **future management plans** for the Faial–Pico Channel MPA – how should the Channel be managed in the future?

These proceedings summarise the key outcomes of the workshop: Section 2 summarises workshop discussions on how stakeholders could participate in the management of the Faial–Pico Channel MPA. Section 3 presents stakeholders' top priority management measures related to fisheries, sustainable tourism, and monitoring/enforcement. Section 4 summarises the four presentations at the workshop, which (1) reflected on AQUACROSS and the first workshop; (2) introduced the MarSP Macaronesian Marine Spatial Planning project; (3) presented 2050 scenarios of the Faial–Pico Channel; and (4) introduced the principles of ecosystem-based management.

2 Stakeholder-based management of the Faial–Pico Channel MPA

A key outcome of the first AQUACROSS workshop was that local stakeholders would like to contribute to managing the Faial–Pico Channel. Stakeholder-based management could take many forms, from informal consultation, to workshops on specific policy topics, to a formal Stakeholder Advisory Group. Following a presentation reflecting on the first AQUACROSS workshop outcomes, in this second workshop's morning session, participants worked in small groups to deepen discussions of stakeholder contribution to Channel management.

A – Stakeholder-based management: Roles and responsibilities

Workshop participants agreed that any participatory management of the Faial–Pico Channel should be inclusive and representative of all users of the Channel, that stakeholders should meet regularly (at least annually), and have some influence over policy (for example, contribute to discussions and/or validate decisions).

The group identified three key roles/responsibility areas:

¹ AQUACROSS is a 3.5-year EU-funded research project that aims to support EU efforts to protect aquatic biodiversity and ensure the provision of aquatic ecosystem services. More information and results from the project, and its eight case studies across Europe, can be found at www.aquacross.eu.

² The first Azores AQUACROSS workshop was attended by 30 local stakeholders. Additional information, including the workshop proceedings, can be found at www.ecologic.eu/15136.

- 1) **Environmental monitoring/evaluation/education:** establish baseline environmental state of the Channel, identify problems, and assess ongoing monitoring. Stakeholders should communicate monitoring results to the public and support environmental education, for example by strategically targeting the public to participate in monitoring. Stakeholders could also support setting up a reporting line and coordinate monitoring by fishers and tourism operators (citizen science), as well as facilitate enforcement of rules.
- 2) **Joint development of solutions:** stakeholders should propose potential measures and policies to address the identified problems.
- 3) **Collaboration/cooperation:** promote synergies and cooperation between users, and minimise conflict. Workshop participants gave the example of the Santa Maria MPAs, where stakeholders have developed a system for diving companies to book diving slots at different diving locations.

B – Benefits of participatory MPA management

Workshop participants identified three major potential benefits of participatory stakeholder management of the MPA, relative to current management:

- **Less conflicts** through better communication between different users and policy entities, and better coordination of all policy-makers.
- **Improved knowledge** of environmental status of the Channel, thanks to more participation in monitoring and collaboration on collecting data.
- **More action** to conserve and protect species and habitats in the Channel, due to greater knowledge, participation, and communication. Stakeholders expect this to result in increased protection and conservation of the MPA.
- Promotion of **multiple uses** of Marine Protected Areas.

C – Barriers to participatory management

Workshop participants identified three key potential barriers to participatory management. These would need to be addressed for stakeholder participatory management to succeed:

- **Communication challenges** – between users and decision-makers, and amongst users. Decision-makers need to prioritise transparency and inclusion. Government can also promote a culture of communication between users and in society by establishing environmental awareness initiatives, government certification, prizes etc.
- **Lack of official recognition** – stakeholders would need to have a recognised role in decision-making, for example, meet regularly and influence policy or be consulted to discuss important decisions. Without clear responsibilities and input, stakeholders will not want to participate.
- **Poor compliance or ongoing environmental degradation** – regulations need to be clearly communicated, partnered with environmental education, and enforced. Stakeholders also emphasised that monitoring and evaluation to ensure regulations were effective was essential for long-term stakeholder buy-in. Additionally, they noted that degradation of the environment (e.g. less fish) could lead to a self-perpetuating cycle where stakeholders'

interest decreases, and they consequently reduce their participation in ongoing actions (e.g. monitoring).

D – Next steps

Workshop participants identified three steps to make greater stakeholder participation a reality in the Channel:

Step one: Management Plan for the Channel – Workshop participants would support, as a first step, clearly defining a management plan for the Faial–Pico Channel. DRAM reported that they are drafting a plan this year.

Step two: Clearly define the role and responsibility of stakeholder participatory management in the Channel – this would need to include clear instructions on when and how stakeholders would enter into the decision-making process. Workshop participants argued that stakeholders must have a real role, at a minimum, in contributing to decisions. This could be recognised in the Channel MPA management plan.

Step three: Identify stakeholders – all sectors/interests need to be represented. This could be based on the Island Nature Park’s stakeholder groups (“grupo consultivo”), though expanded and updated to include DRAM and ensure that all sectors/interests are represented.

3 Future management measures

The aim of the afternoon session was to prioritise and develop management measures that would ensure the sustainability of the Channel into the future whilst also meeting stakeholders’ many objectives. Based on stakeholder input in previous workshops and interviews, and on AQUACROSS research into the Faial–Pico Channel socio–ecological system (see presentation in section 4), participants discussed three policy topic areas: fishing, sustainable tourism, and monitoring/enforcement. Stakeholders participated in a dynamic World Café session, where three small groups had fifteen minutes at each station to suggest measures, vote on their top priority, and then develop the priority policy.

Table 1 presents the top three priority measures for each policy theme. As well as prioritising measures, each group spent ten minutes discussing how to implement their top priority measure; we summarise these discussions below.

Table 1 Top priority measures, by theme, as voted by workshop participants (3 votes per participant)

Type	Measure	Votes
Fishing	Simplify/communicate the existing, complicated fisheries legislation	14
	Invest in education/environmental awareness measures related to fisheries legislation (e.g. information panels)	7
	Prohibit the use of certain fishing gear (i.e. potentially more impactful gear)	7
Monitoring / inspection	Finance long-term biodiversity monitoring in the Channel	9
	Improve communication/coordination between departments responsible for monitoring/surveillance	9

	Increase fines/surveillance on illegal fishing (recreational/commercial)	7
Sustainable tourism	Apply a "tourist tax" for the protection of biodiversity	9
	Develop specific conservation programs for particular species/habitats	8
	Invest in the training of tourism-related people in relation to marine biodiversity	8

Fishing measures

Simplify/communicate the existing, complicated fisheries legislation

Stakeholders prioritised simplification and communication of existing fisheries rules, which also overlaps with a second priority, **investing in awareness and education related to fisheries legislation**. The workshop suggested combining MPA management for the whole Channel, rather than splitting it between Faial and Pico Island Nature Parks. A central management group, featuring all policy entities (DRAM, Island Nature Parks, Direção Regional das Pescas) and broad stakeholder representation, should manage the Channel. This group should collaborate to simplify existing regulations for the Channel into a maximum of 2–3 regulations, which all stakeholders would be able to comprehend. This group and the government should then publicise these regulations, for example through information panels at strategic locations (e.g. the harbour, boat ramps), offering a question and answer service centre, and by investing more generally in environmental and fisheries education. The Azores government should finance these actions. Stakeholders expect that simpler regulations and better communication would significantly improve comprehension of the laws (i.e. understanding of what is allowed and prohibited) by the wider public (including recreational fishers), and thus improve compliance, and the conservation of species and habitats in the Channel.

Prohibit certain fishing techniques/gears

Workshop participants identified better management of certain fishing gears (e.g. fishing traps, and gillnets) as another priority. A first step to implement this measure would be to evaluate which techniques/gears should be targeted. This evaluation should include stakeholder input, as regulating fishing traps, for example, may be politically difficult. Regulations should define allowable types of traps and minimum trap depth. Monitoring could be done using surveillance cameras. Alongside any new regulations, government should mount an information campaign to communicate the importance of not leaving old or broken fishing gear behind. Participants believe that such a policy would improve the conservation status of certain species, such as the slipper lobster, and also have co-benefits for tourism stakeholders (especially divers).

Monitoring/enforcement measures

Coordinate all government department monitoring/enforcement

Workshop participants identified better coordinated monitoring and enforcement as the top priority. Relevant government departments should establish a working group to coordinate different departments to jointly monitor/enforce rules in the Channel; this should include maritime police as well as policy representatives. This working group should meet regularly (potentially using an online portal) to coordinate joint actions and improve communication. Finally, the working group should assign or hire additional staff for enforcement.

Fund long-term biodiversity monitoring in the Channel

An equal top priority for workshop participants was improved long-term monitoring of the Channel. Given the shared benefits of better information, workshop participants suggested three potential sources of financing: fees levied on divers, income from fishing fines, and a fee for shore-fishing permits. Recreational and commercial fishers should also participate in monitoring (citizen science). Overall, the monitoring programme should be underwritten and supervised by the national and regional government.

Increase fines/enforcement for illegal fishing (recreational/commercial)

Workshop participants believe that stronger enforcement of commercial and recreational fishing could improve biodiversity protection. They suggested an increase in the value and frequency of fines. They also suggested that offenders be named publically, and repeat offenders should have their licence suspended or cancelled. Additionally, modern technologies such as surveillance cameras should be employed, alongside an increase in resources for standard monitoring and enforcement.

Sustainable tourism measures

Apply a "tourist tax" for the protection of biodiversity

Workshop participants suggest that a tourist tax could either be levied on all marine activities (i.e. diving, whale-watching, recreational fishing) or could be applied per stay (i.e. collected by hotels). The tax collected should be administered by DRAM, who should use this to finance specific biodiversity measures, such as environmental awareness campaigns, monitoring/enforcement equipment (e.g. boats), training, educational programmes, and conservation measures. This must be transparent, with tax collected and programmes/results comprehensively communicated to society.

Develop a specific conservation programme targeting specific species/habitats

Workshop participants suggested that DRAM should be responsible for developing a specific conservation programme. To do so, they suggested as a first step a comprehensive scientific assessment of Channel species and habitats to identify target species and habitats. DRAM should collaborate closely with other relevant users/entities such as academic departments, tourism regional directorate, fisheries regional directorate, and stakeholders.

Invest in the training of tourism-related people in relation to marine biodiversity

While stakeholders also identified this as a high priority measure, they focussed discussions on developing the previous two measures.

4 Presentations

To inform discussions, the workshop featured four presentations.

Introduction: AQUACROSS and the Faial–Pico Channel – Holger Gerdes, Ecologic Institute

Holger Gerdes opened the workshop by introducing the AQUACROSS project¹ and reflecting on the key outcomes of the [first Azores AQUACROSS workshop](#)³, which 30 local stakeholders attended on the 3rd of October, 2017. Key conclusions of this workshop include (1) commercial and recreational fishers, tourism operators, scientists, and other local stakeholders all value the Faial–Pico Channel, and want to cooperate to protect its long-term sustainability; (2) stakeholders want to contribute to managing the Channel, for example through a working group or ongoing input into a Marine Protected Area Management Plan; (3) stakeholders desire increased monitoring, enforcement, and evaluation of regulations in the Channel and their effectiveness.

Macaronesian Maritime Spatial Planning (MarSP) Project: Introduction and update – Gilberto Carreira, Direção Regional dos Assuntos do Mar (DRAM)

The Macaronesian Maritime Spatial Planning ([MarSP](#)) project is an EU-funded project to develop capacity, tools, and concrete marine spatial plans for the Macaronesian region. It runs from January 2018 until December 2019. It also features a Faial–Pico Channel case study, organised by DRAM. Gilberto Carreira introduced the project. He also shared the common vision for maritime spatial planning that was drafted at MarSP's first Azores workshops: MSP should manage the sea of the Azores to maximise social and economic development, maintain its Good Environmental Status, assure its common use, and conserve its natural values. Gilberto Carreira noted the compatibility of the AQUACROSS and MarSP projects. He also emphasised that the MarSP project will result directly in new policy, and encouraged all stakeholders to participate in future meetings to ensure their views are heard and incorporated into future regulation.

Current and future uses of the Faial–Pico Channel Marine Protected Area: What will the future look like? Feedback on the AQUACROSS 2050 baseline scenario – Hugh McDonald, Ecologic Institute

To provide context for discussing future management of the Faial–Pico Channel, Hugh McDonald presented the results of forthcoming AQUACROSS research describing the complex socio–ecological system of the Faial–Pico Channel (see Figure 1).

³ Information on the first workshop, including the workshop proceedings that summarise the discussions and key outcomes, are available at www.ecologic.eu/15136.

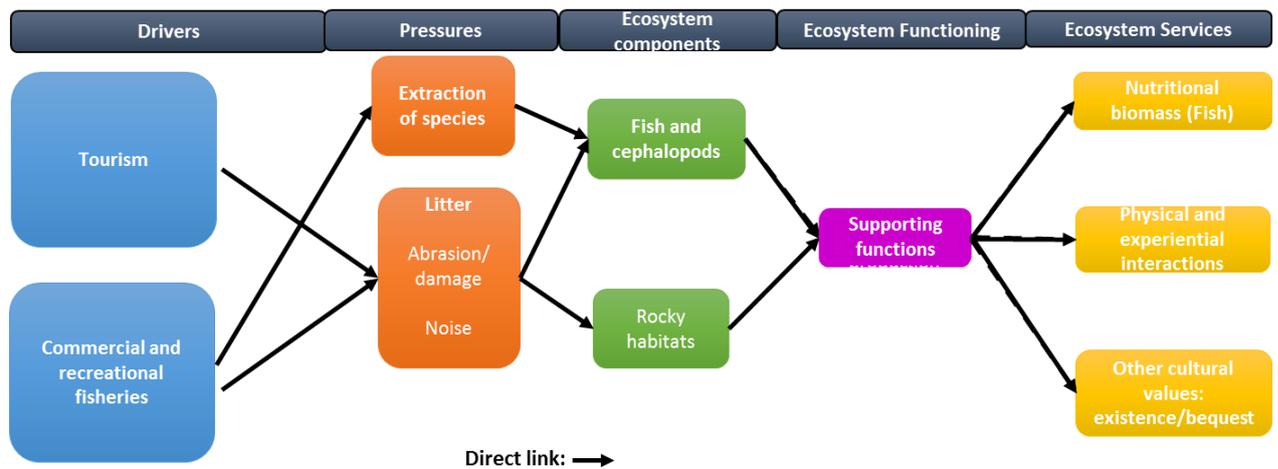


Figure 1 – Faial–Pico Channel – key elements of the complex socio–ecological system

Based on research and Azores stakeholder–input, the presentation considered how trends in the important drivers, pressures, and ecological state might affect the sustainability of the ecosystem and its ability to continue to deliver all stakeholders benefits (ecosystem–services) up until 2050. Key conclusions were that, up until 2050:

- Tourism visitors will continue to increase, and will have increasing economic importance.
- While commercial fishing will continue, uncertain and variable fish stocks mean the health of the local fishing industry is unclear. In the long run, fishing is dependent on the health of the ecosystem.
- Recreational fishing will continue to be important to locals and tourists, though also dependent on a sustainable Channel.
- Marine habitats and species will be under increasing pressure in Faial–Pico Channel. This will affect all: fishers, locals, tourists, and others who value the ecosystem services provided by the Faial–Pico Channel.
- Future scenarios are uncertain – especially in the face of climate change and external economic shocks – and the Azores will need to be resilient and adaptable.

Workshop participant generally approved the analysis and also provided useful feedback. Science and technology was identified as a potential future driver of economic activity, and sand dredging as a potential pressure. Participants also discussed the lack of long–term biodiversity monitoring data in the Channel and limited fish stock data. Scientists present reported with medium–levels of confidence that fish stocks and biodiversity in the Channel were declining. Recreational fishers agreed, stating that it was “harder to get big catches at any time of year”. Commercial fishers and scientists both emphasised that there was significant uncertainty and seasonal variability, and that it was very difficult to determine trends, especially in as small an area as the Channel. Commercial and recreational fishers were interested in potentially assisting with monitoring in the future.

Future management plans for the Faial–Pico Channel: Ecosystem–based management – Hugh McDonald, Ecologic Institute

To support stakeholder discussions on future management measures for the Faial–Pico Channel, Hugh McDonald introduced the six principles of Ecosystem–based management. Ecosystem–based management, central to the AQUACROSS project, is an integrative approach to managing biodiversity whilst also meeting other policy and stakeholder goals. Ecosystem–based management: (1) considers ecological integrity, biodiversity, resilience and ecosystem services; (2) is carried out at appropriate spatial scales; (3) develops and uses multi–disciplinary knowledge; (4) builds on social–ecological interactions, stakeholder participation and transparency; (5) supports policy coordination; and (6) incorporates adaptive management.