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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

34th meeting
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RECOMMENDATION N° 170 (2014) ON THE EUROPEAN CODE OF CONDUCT ON RECREATIONAL FISHING AND INVASIVE ALIEN SPECIES

Document
prepared by
the Directorate of Democratic Governance

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Convention on the Conservation

of European Wildlife and Natural Habitats

Recommendation No. 170 (2014) of the Standing Committee, adopted on 5 December 2014, on the European Code of Conduct on Recreational Fishing and Invasive Alien Species

The Standing Committee to the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the Convention,

Having regard to the aim of the Convention which is notably to ensure the conservation of wild flora and fauna, by giving particular attention to species, including migratory species, which are threatened with extinction and vulnerable;

Recalling that under Article 11, paragraph 2.*b* of the Convention, each Contracting Party undertakes to strictly control the introduction of non-native species;

Recalling its Recommendation No. 41 (1993) on the conservation of freshwater fish;

Recalling its Recommendation No. 99 (2003) on the European Strategy on Invasive Alien Species;

Recalling its Recommendation No. 150 (2010) on the European Charter on recreational fishing and Biodiversity;

Recalling Decision VI/23 of the 6th Conference of the Parties of the Convention on Biological Diversity, on Alien species that threaten ecosystems, habitats or species, and the definitions used in that text;

Recalling that the 10th Conference of the Parties of the Convention on Biological Diversity adopted the Strategic Plan for Biodiversity 2011-2020 with its 20 headline Aichi targets for 2020, in particular Target 9 devoted to invasive alien species (IAS): "By 2020, invasive alien species and pathways are identified and prioritised, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment";

Welcoming the EU Biodiversity Strategy to 2020, endorsed by the Council of the European Union in June 2011, and in particular its Target 5, calling on Member States to combat IAS so that by 2020 IAS and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS;

Welcoming the Regulation of the European Parliament and of the Council on the prevention and management of the introduction and spread of invasive alien species;

Noting the need to co-operate with all the actors involved in recreational fishing activities in the prevention and management of the introduction and spread of IAS into the territory of the Convention;

Referring to the European Code of conduct on recreational fishing and invasive alien species [document T-PVS/Inf (2014) 18],

Recommends that Contracting Parties:

1. Take the European Code of Conduct mentioned above into account while drawing up other relevant codes - or where appropriate - draw up national codes of conduct on recreational fishing and IAS,

2. Collaborate as appropriate with the actors involved in recreational fishing activities in implementing and helping disseminate good practices and codes of conduct aimed at preventing and managing of introduction, release and spread of invasive alien species,

3. Keep the Standing Committee informed of measures taken to implement this recommendation;

Invites Observer States to take note of this recommendation and implement it as appropriate.

Appendix I to Recommendation No. 170 (2014) of the Standing Committee, adopted on 5 December 2014, on the European Code of Conduct on Recreational Fishing and Invasive Alien Species

EUROPEAN CODE OF CONDUCT ON RECREATIONAL FISHING AND INVASIVE ALIEN SPECIES

CONTENTS

PRESENTATION

The Council of Europe has been particularly active in the last 20 years in the field of invasive alien species, one of the main world threats to native biological diversity. The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) created in 1993 a Group of Experts devoted to the analysis of the impacts of invasive alien species on European biodiversity. The Group was asked to propose measures that governments may take to avoid new introductions and control the spread of invasive alien species. These are complex tasks that cannot be just trusted to a few experts, but that need the collaboration of the many different actors dealing on a daily base with organisms or living material, be it in the horticultural industry, in the pet trade, recreational fishing or in institutions, such as botanical gardens, zoos or aquaria which hold collections of non-native animals or plants.

The Council of Europe is preparing, for their attention, a number of "codes of conduct" aimed at making those industries and institutions more aware of the risks for native biodiversity of the non-native species they handle or encounter. Recreational fishermen are becoming increasingly concerned as to the impact of invasive alien species on habitats, water quality and native fish species and a mixed response from Member States governments in taking actions to prevent, contain and eradicate these species where found.

These code aims to offer some guidance to all angling bodies, recreational fishers, businesses that rely on recreational fishers as well as the fishing tackle industry in general in the hope that, knowing their commitment to biodiversity and conservation, they will use it in their everyday fishing activities and thus contribute to the noble task of preserving our ecosystems free as far as possible from the impacts of invasive alien species as committed to in the European Charter on Recreational Fishing and Biodiversity (2010).

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The author is grateful for the work done by the authors and collaborators of the EIFAC code of Practice for Recreational Fisheries (2008), the European Charter on Recreational Fishing and Biodiversity and the GB Non-Native Species Secretariat as this code is based on their work. Compilation of journals showing impacts in the Mediterranean was completed by Massimo Lorenzoni.

1. INTRODUCTION

The *Millennium Ecosystem Assessment* (WRI 2005) regards invasive alien species (IAS) as, globally, one of the most important direct drivers of biodiversity loss and ecosystem service changes alongside overexploitation, pollution, habitat destruction and climate change. Even apart from the biodiversity loss they can cause serious economic loss and impact on human health, as Europe moves to value ecosystem services and indeed look to bring in ecosystem services accounting as part of decision making in, for example the European Water Framework Directive 2000, the effects of the impacts of IAS will become more prominent and to a wider audience than is the case today.

Evaluations of the financial cost of the impacts of IAS have been attempted in the past but these tend to be direct cost in relation to control management and economic loss rather than evaluating loss to ecosystem service. At a global level Pimentel *et al* (2005) estimated the cost at 5% of global GDP whilst at a European level Kettunen *et al* (2009) calculates a cost of 12 billion Euros a year.

The difference between invasive alien species and alien species is also important as there are benefits to some introductions to certain groups whereas the cost if the risks are not correctly assessed are born by society as a whole (Pimentel *et al* 2000). In past times little thought was given to introductions of species now defined as IAS and recreational fishing, through its contact with and use of aquatic and riparian species, has been identified as a potential, actual primary and secondary pathway for the spread of invasive alien species. Savini *et al* (2010) in reviewing the top 27 animal alien species introduced in Europe for aquaculture and related activities considered information extracted from IMPASSE, Daisie, Fish-Base and FAO-DIAS inventories to list 27 of the most common animal species used in aquaculture, stocking, sport fishing and for ornamental purposes considered their environmental impact together with their ability to act as vectors for other alien species and pathogens; in conclusion they found that of sport fish those of a predatory nature (e.g. catfish and salmonids) "cause major environmental impacts in Europe by outcompeting native species and altering habitat structure". Tricarico (2012) concluded that in a review on pathways and drivers of use regarding non-native freshwater fish introductions in the Mediterranean region that as well as improved legal controls being required to protect native fish species from introductions of non-native Perciformes and Cypriniformes through aquaculture and angling purposes there needs to be a greater dive to improve public awareness of the risks involved in such introductions.

By formatting this Code of Conduct it is anticipated that through education and awareness recreational fishing will form part of the solution in tackling invasive alien species by acting as the "eyes and ears" of the rivers, lakes and seas of Europe in spotting and reporting the spread of these species as well as being active in control and eradication. The recreational fisheries sector identified the threat of invasive alien species in the early 2000's as part of a review of all practices, upon the request of the European Inland Fisheries Advisory Commission (EIFAC) a code of practice was prepared by R. Arlinghaus (Leibniz-Institute of Freshwater Ecology and Inland Fisheries and Humboldt-University of Berlin, Germany) with the assistance of I. Cowx (International Fisheries Institute, University of Hull, United Kingdom) and R. van Anrooy (Food and Agriculture Organisation of the United Nations). This EIFAC Code of Practice for Recreational Fisheries (EIFAC Occasional Paper No. 42) forms the basis of this Code of Conduct highlighting the articles and codes that relate to Invasive Alien Species and the report forms an integral appendix to this Code. These issues were also raised and addressed in the European Charter on Recreational Fishing and Biodiversity (2010) prepared by Mr. Scott Brainerd and in particular Principle 4 states the necessity of maintaining populations of native species with adaptive gene pools and this document also forms an integral appendix to this code.

In addition this Code of Conduct incorporates detailed biosecurity guidance for recreational fishing as it is fully recognised that preventing the arrival of IAS by recreational fishers as a vector is more effective than control and eradication once they have arrived.

This Code of Conduct is one of a number of voluntary instruments that are being drawn up or completed and adopted by the Bern Convention in sectors identified as possible pathways and they include "Hunting and IAS", "Pets and IAS", "Botanic Gardens and IAS" against a back drop of a European Union Regulation on IAS that has been adopted in October 2014. This process also fulfils

commitments made by the European Commission in Communication "Our life insurance, our natural capital: a EU biodiversity strategy to 2020" (COM 2011 244) together with commitments made in Aichi Target 9 of the "Strategic Plan for biodiversity" (CBD OP10 Nagoya, Japan 2010).

1.1 Socio-Economic value of recreational fishing

As stated in the European Charter on Recreational Fishing and Biodiversity [ECRFB] (Council of Europe 2010): "Fishing is an age-old activity throughout Europe and the world. Originally a form of subsistence and sustenance for early Europeans, it has evolved over time into an important consumptive activity with both commercial and recreational aspects." In this Code of Conduct we are only concerned with recreational fishing but it should be recognised that there are many businesses in Europe that rely and work with recreational fisheries from charter boats that take fishers fishing in the marine environment, farmers and land owners that rent waters to fishers to commercial units that build specialist facilities to fish farms that supply fish to be stocked and this list is not exhaustive. Across Europe a number of techniques and equipment are used in recreational fishing. The most common is the use of rod, hook and line but also hand lines, long lines, nets, pots, traps and projectile or spear fishing. However in using the term "recreational fishing" this implies and is accepted as either taking fish for home consumption or releasing the fish once caught in a manner that does not cause harm. Angling is a term used to describe the use of hook and line.

A number of organisations across Europe have attempted to quantify the socio-economic benefits of angling and the numbers of people that take part in this activity. The European Anglers Alliance (the umbrella organisation for anglers in Europe) estimated that in 2003 there were at least 25 million recreational anglers (EAA 2003) taking part in both freshwater and saltwater, an updated study by the European Anglers Alliance is currently being finalised (EAA 2013). ERFB reports Kenward R. & Sharp, S. (2008) as estimating that in 2006 19 billion Euros was spent by anglers on fishing equipment, fees to fish, lodging and travel. The European Fishing Tackle Trade Association (EFTA) estimates that 99,000 jobs depend on local tackle shops, manufacture and the trade of fishing tackle (EFTA 2009). These figures are likely to be an underestimate as a more recent survey in England and Wales conducted by the UK Government in 2010 concluded that sea, coarse and game angling contributed £3.5 Billion per annum to the economy, supported 37,000 jobs and 4 million people had gone fishing in the last 2 years (Public attitudes to angling, Environment Agency 2010 & Economic Evaluation of Inland Fisheries, Environment Agency 2010).

The ECRFB goes on to state that "most European countries have instituted freshwater license programs and about half of coastal countries have also introduced saltwater fishing licenses." In England and Wales licensing from freshwater raised £24.7 million in the financial year 2012-2013 (Environment Agency 2013), revenues from licensing are used with varying amounts of transparency and accountability to mainly support the funding of activities relating to recreational fishing (pers. comm.).

In Article 5.6 of the ECRFB it states that "Each stakeholder within the recreational fishing sector should: accept that environmental stewardship is the overriding ethical principle to which recreational fishing practice and its management will be judged by others." This principle underscores the potential of recreational fishing playing a key role in prevention, control and eradication of IAS. In 2012 the Angling Trust (the representative body for angling in England), the Environment Agency and the Substance social research cooperative conducted a survey of anglers in England to which there were nearly 30,000 responses. 26% of respondents stated that they would like to get involved in environmental improvement volunteering (NAS 2012) and respondents categorised IAS in the top 6 most severe threats to angling (NAS 2012). There is therefore a largely untapped volunteering resource available in recreational fishing which could be utilised for work on IAS.

1.2 European and Member States legislation and initiatives

The European Commission in Communication "Our life insurance, our natural capital: a EU biodiversity strategy to 2020" (COM 2011 244) has been referred to before in this report, it contains a commitment that "By 2020, Invasive Alien Species (IAS) and their pathways are identified and prioritised, priority species are controlled or eradicated and pathways are managed to prevent the introduction and establishment of new IAS". The Communication also recognised the need for the introduction of legislation at a European level in order that targets were met. Whilst there was a commitment for this to be completed by 2012, at the time of this report in 2013 details have still not emerged of how this will be taken forward or whether this will take the form of a new Directive or Regulation.

At Member State level legislation tends to be mixed and spread between different legislation and enforcement authorities. In England and Wales for example there is the Live Fish (England & Wales) Act 1980 which is enforced by the Environment Agency and relates to the movement of fish into and around England & Wales including IAS and there is also the Wildlife & Countryside Act 1981(WACA) which also contains provisions relating to IAS enforcement of this being split between various authorities including the Police Service but it contains no powers to enter property or enforce destruction of IAS on private property if the owner refuses consent. This mixed approach appears to be prevalent across Europe and this author's contact with angling representative bodies across Europe also indicates a mixed response by authorities in taking action on IAS when reported.

1.3 European Inland Fisheries Advisory Commission (EIFAC) Code of Practice for Recreational Fisheries

In recognising the need for a voluntary code of practice for all matters pertaining to recreational fisheries the Food and Agricultural Organisation of the United Nations commissioned this guide in partnership with the angling community and endorsed by the European Anglers Alliance and member bodies. Its aim is to "establish best practice principles amongst nations for responsible management and fishing practices, taking into account all relevant biological, technological, economic, social, cultural and environmental aspects. This EIFAC agreed voluntary policy document has to fit alongside national legislation and regional best practice guidelines and is designed to be the minimum standards for environmentally friendly, ethically appropriate and socially acceptable recreational fishing". It contains a number of Articles which are relevant to IAS:

Article 2.7: "to improve communication and mutual understanding among recreational fisheries stakeholders and with other parties".

Article 2.8: "to promote research into recreational fisheries as well as on aquatic ecosystems and the relevant environmental factors which influence recreational fisheries".

Article 3.3: "In its region, EIFAC, in collaboration with government agencies and recreational fisheries associations, will monitor the application and implementation of the CoP and its effects on recreational fisheries amongst its member countries."

Article 3.4: "In its region, EIFAC, as appropriate, will revise the CoP periodically, taking into account new developments in recreational fisheries, with full consultation of relevant stakeholders."

Article 8.10: "immediately report pollution incidents, distressed or dead fish, the presence of unusual species, non-native species and other environmental impacts/observations to the relevant authorities."

Article 8.11: "not stock, introduce or transfer live fish or other aquatic organisms within or between catchments without permission from the authorities. This particularly applies to non-native organisms."

Article 8.19: "use bait, particularly live bait, only in agreement with local or national regulation, and use aquatic organisms only in the water body from which these are collected; never transfer aquatic live bait from one water body to another." N.B Live bait is defined as the "use of live invertebrates, (e.g. crayfish), vertebrates, (typically teleost fish) and worms and maggots in recreational fishing".

Article 11.27: "Introduction of non-native species to create fisheries should be avoided. Where proposed, they must comply with the EIFAC Code of Practice on Species Introductions and be reviewed by qualified, independent experts".

1.4 European Charter on Recreational Fishing and Biodiversity, prepared by Mr. Scott Brainerd in 2010, on behalf of the Bern Convention

This Charter also considers the role of recreational fisheries in the conservation of biodiversity by the use of sustainably managed fisheries. It highlights the considerable number of recreational fishers across Europe and their contributions to habitat, fish conservation and national policy decision making. The Charter contains 10 Principles and a sub set of guidelines, Principle 4 is titled "Maintain populations of native species with adaptive gene pools" and considers that conservation will be enhanced if regulators and managers of recreational fisheries:

- "Prevent the release, spreading and translocation of invasive alien species that can have significant impacts on native fish populations or the environment";
- "Engage recreational fishers in programmes to remove invasive alien species";
- Facilitate the reestablishment of originally indigenous fish species in accordance with IUCN guidelines and have clear management plans that define their recovery".

2. BIOSECURITY FOR RECREATIONAL FISHERIES

The Ponto-Caspian species; *Dikerogammarus villosis* was first found in England & Wales in September 2011at a public water supply reservoir at Grafham Water in England which is used by both anglers and boaters (GBNNSS 2011) The emergency biosecurity response was to require water users to use disinfectants to kill the shrimp to prevent spreading to other water bodies, however in laboratory conditions the Environment Agency found that this was not an adequate control that they could survive in damp conditions for up to 15 days or 2 days in dry conditions (GBNNSS 2011).

United Kingdom (UK) Government Departments and its Agencies together with environmental Non-Government Organisations and representative bodies from all water users in the UK adopted similar practices to that found in New Zealand by launching a public initiative for all water users to adopt the principles of "Check, Clean, Dry" in January 2012 (*pers. comm.*). This relies on Public participation, education, awareness raising and training to ensure that these procedures are followed, namely:

Check – All clothing and equipment should be thoroughly inspected and any visible debris (mud, plant or animal matter) should be removed and left at the water body where it was found. Particular attention must be paid to the seams of boots and waders. Any pockets of pooled water should be emptied. (GBNNS 2013).

Clean – Equipment should be hosed down or pressure-washed on site. If facilities are not available equipment should be carefully contained e.g. in plastic bags, until they can be found. Washings should be left at the water body where the equipment was used or contained and not allowed to enter any other water course or drainage system (i.e. do not put them down the drain or sink). Where possible, clean equipment should be dipped in disinfectant solution (e.g. Virkon) to kill diseases, but note this is unlikely to kill non-native species. (GBNNSS 2013).

Dry – Thoroughly drying is the best method for disinfecting clothing and equipment. Boots and nets should be hung up to dry. Equipment should be thoroughly dry for 48 hours before it is used elsewhere. Some non-native species can survive for as many as 15 days in damp conditions and up to 2 days in dry conditions, so the drying process must be thorough. (GBNNSS 2013).

Whilst 2 other, localised sites, were found to contain *Dikerogammarus villosis* in Wales, to date this species have been contained at these 3 sites since the launch of the campaign. This report therefore recommends that this good practice should become the norm for biosecurity control for Recreational Fisheries and other water uses in Europe.

3. THE CODE OF CONDUCT

Audience and aims

This code of conduct is aimed at all those that engage in recreational fishing and fisheries whether anglers, voluntary bodies like clubs or affiliated angling groups, angling governing bodies or those that are commercially engaged with recreational fishing and fisheries for example charter boats or those that run fisheries as a business. It is also intended for those Member States and their agencies that regulate recreational fisheries. However this code is voluntary only, not a legally binding instrument nor is it the intention that this code be used as the basis for future legislation.

Its aim is also to be compatible with the Convention on the Conservation of European Wildlife and Natural Habitats European Charter for Recreational Fishing and Biodiversity (2010), the European Inland Fisheries Advisory Commission's EIFAC Code of Practice for Recreational Fisheries (2008) and the Food and Agriculture Organisation of the United Nations' Code of Conduct for Responsible Fisheries (adopted 1995). These three documents all contain mention of good practice for invasive alien species and this code draws these together in one document but further brings in the concept of biosecurity following the approach taken in the United Kingdom and in this case the Check, Clean, Dry protocols developed by the GB Non Native Species Secretariat in collaboration with other United Kingdom Government Departments and Non-Governmental Organisations are followed. Many of the codes in these documents are repeated verbatim here or slightly altered to highlight the issues around invasive alien species.

3.1 Awareness, education, research, training and monitoring

The recreational fishing sector should:

- Promote awareness of the code to encourage responsible recreational fisheries through targeted information, education and training of recreational fishers, managers, policy-makers and other stakeholders. Particular emphasis should be placed on identification and reporting procedures together with biosecurity.
- Collaborate with relevant experts in developing awareness and education programmes aimed at informing recreational fisheries on invasive alien species.
- Government agencies and authorities should engage with recreational fishers in programmes to remove invasive alien species.
- Promote research into recreational fisheries as well as on associated aquatic ecosystems and the relevant environmental factors which influence recreational fisheries.
- In collaboration with government agencies and recreational fisheries associations, monitor the application and implementation of the Code of Conduct and its effects on recreational fisheries among Member States.
- This Code of Conduct should be reviewed periodically, and as appropriate, taking into account new developments in IAS as it impacts recreational fishing.

3.2 Fisheries management

The EIFAC code states in Article 11.1 that "the over-arching goal of recreational fisheries management is to ensure the long term sustainability of fisheries resources thereby safeguarding the availability of these resources for future generations. Sustainability of fisheries resources includes conservation biodiversity at all levels, including genetic diversity, as well as supporting terrestrial and aquatic ecosystems." Invasive alien species are a threat to this principle. Recreational Fisheries should therefore:

- Prevent the release, spread and translocation of invasive alien species that have impacts on native fish populations or the environment.
- Authorities should engage recreational fishers in programmes to remove invasive alien species to increase educational and practical awareness as well as using them as a resource.
- Recreational fishers should engage with authorities or others in management planning for biosecurity and control and eradication of invasive alien species.

- Stocking and re-stocking should only be in accordance with Member State regulation and guidance which should also be in accordance with IUCN guidelines.
- Immediately report the presence of invasive alien species in accordance with Member State guidelines.
- Not stock, introduce or transfer live fish or other aquatic organisms within or between catchments without permission from the authorities.
- Use bait, particularly live bait, only in agreement with local or national regulations and use aquatic organisms only in the water body from which these were collected; never transfer aquatic live bait from one water body to another.
- Introduction of any non-native species to create fisheries should be avoided. Where proposed, they must comply with the EIFAC Code of Practice on Species Introductions, local or national regulations and be reviewed by qualified, independent experts.

3.3 Biosecurity for Recreational Fishing

In some places in Europe this will be a new concept but builds on the practices in Australia, New Zealand and most recently in the United Kingdom following the recent discovery of Ponto-Caspian species in that country. The overriding principle is that prevention is better than cure and the key to success in this approach is the awareness, education and training principles noted previously and recognises that recreational fishers contact with water via equipment or clothing can result in their inadvertently becoming a vector for the transfer of invasive alien species. Equipment includes fishing tackle but also boats and engines used during fishing.

General

- Anglers should make themselves aware of invasive alien species and partake in education programmes designed for this.
- Adequate signage or guidance should be in place, making all anglers aware of the risk and providing advice on how to prevent spread.
- Ideally all cleaning and inspection operations should be supervised by a volunteer or member of staff.
- Where practical, access and egress for anglers should be limited, preferably to a single spot, preferably to a single point. Anglers should log in and out, confirming that they have cleaned and inspected their equipment. Where a new invasive alien species has been identified this procedure should always be followed to allow containment.
- Any site may have invasive alien species and diseases that can be spread.
- Risk can be reduced by reducing the contact time in which equipment is exposed to water.
- If possible nets, drogues, boats and boat equipment should be provided at the site and used in preference to personal equipment brought in from off site.
- De-hooking mats and bass bags should not be allowed in the water and should be thoroughly cleaned after use and dried.

Check, Clean, Dry disinfection procedures

- **Check** – all clothing and equipment should be thoroughly inspected and any visible debris (mud, plant or animal matter) should be removed and left at the water body where it was found. Particular attention must be paid to the seams and seals of boots and waders. Any pockets of pooled water should be emptied.
- **Clean** – Equipment should be hosed down or pressure washed on site. If facilities are not available equipment should be carefully contained, e.g. in plastic bags, until they can be found. Washings should be left at the water body where the equipment was used, or contained and not allowed to enter any other watercourse or drainage system (i.e. do not put them down the drain or

sink). Where possible clean equipment should be dipped in disinfectant solution (e.g. Virkon) to kill diseases but note that this is unlikely to kill alien species.

- **Dry**- Thoroughly drying is the best method for disinfecting clothing and equipment. Boots and nets should be hung up to dry. Equipment should be thoroughly dry for 48 hours before it is used elsewhere. Some alien species can survive for as many as 15 days in damp conditions and up to 2 days in dry conditions so the drying process must be thorough.

Boats

Where recreational fishers and fisheries use boats or float tubes for angling purposes then in addition to the above:

- Biofouling must be thoroughly removed from all hulls and other submerged surfaces before transfer to another site.
- Care should be taken with trailers which have cavities that may retain water and be hard to inspect. If possible trailers and launching trolleys should be provided at the site and used in preference to personal equipment.
- Any water that collects in bilges or inside boats and float tubes must be completely emptied before leaving the site.
- Water cooled engines must be washed through with tap water to ensure the system does not harbor invasive alien species.

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