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**SETTORE VI AMBIENTE**



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**GUIDELINES FOR DECISION MAKERS**

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## INDEX

<b>1.</b>	<b>INTRODUCTION</b> .....	<b>1</b>
<b>2.</b>	<b>GUIDELINES FOR LOCAL NEEDS</b> .....	<b>5</b>
2.1	PROTECTING AND PROMOTING NATURAL ASSETS.....	5
2.1.1	<i>Actions aimed at the conservation and enhancement of biodiversity</i> .....	5
2.1.2	<i>Supporting aquaculture, including organic practices</i> .....	10
2.1.3	<i>Actions to reduce habitat fragmentation and to maintain ecological and functional corridors around lake salto and lake turano</i> .....	10
2.1.4	<i>Restoration of specific lake habitats to support sustainable fish stocks</i> .....	11
2.1.5	<i>Interventions to improve the conditions and standards of offers and enjoyment of the heritage in areas of natural beauty</i> .....	17
<b>3.</b>	<b>GUIDELINES FOR MANAGEMENT PLAN FOR SPORT AND PROFESSIONAL FISHING IN LAKE SALTO AND LAKE TURANO</b> .....	<b>19</b>
3.1	SPORT FISHING .....	19
3.2	PROFESSIONAL FISHING .....	21
<b>4.</b>	<b>REFERENCES</b> .....	<b>24</b>

## 1. INTRODUCTION

The Province of Rieti identified Good Practice N° 7 - “*Stakeholder participation and feedback*” - proposed by Syke - Finnish Environment Institute (Finland), as an instrument filling Need of Knowledge N° 4: “*Lack of a sustainable management plan to run professional and game fishing*” for the Province of Rieti, with particular reference to the lakes of Salto and Turano.

As part of the process of transferring Good Practice N° 7, some cues were also taken from an analysis of GP N° 4, “*Multi-criteria assessment in comparison of options in lake restoration planning,*” particularly when it came to identifying the stakeholders.

The participation process involving lakeside communities affected by the LakeAdmin project has produced a list of common objectives shared by local authorities and stakeholders. The aim of these objectives is the enhancement of Lakes Salto and Turano. These objectives are defined “Local needs” and there is a total of 50 in all. The participation process has been the first concrete opportunity for stakeholders to express their actual needs and to see that their expectations are responded to and pursued in the management of the two lakes.

It has also been the first occasion to enable open exchange of ideas and dialogue between the parties with the aim not of imposing individual or special group interests, but of identifying shared useful strategies and proposals for the plurality of interests involved. In this way, the Provincial Council has been able to gather together and systematise the requests and requirements of the various stakeholders into an operational strategy, represented by guidelines for implementing the various actions identified.

This document sets out those implementation guidelines found to be of prime environmental interest and therefore immediately realisable by the Province of Rieti. These guidelines concern 19 out of a total of 50 activities/interventions described under “Local needs” in the Implementation Plan.

The remaining 31 ‘Local needs’, which are not of direct interest within the aims and objectives of the Implementation Plan, may be pursued at a later date once coordination has been enacted with the environmental or administrative authorities responsible for those sectors on which those actions focus.

The following implementation guidelines set out therefore operational procedures for tackling the 19 selected items, the “Local needs” that have emerged on the ground, and for modifying fisheries regulation.

All the “Local needs” to have emerged during the drafting of the Implementation Plan are shown in the summary table below (**Errore. L'origine riferimento non è stata trovata.**).

**Table 1-1: List of the 50 “Local needs” and of the 19 selected for development of the Guidelines (in green)**

LOCAL NEEDS	GUIDELINES
<b>PROTECTING AND PROMOTING NATURAL ASSETS</b>	
<b>A - ACTIONS AIMED AT THE CONSERVATION AND ENHANCEMENT OF BIODIVERSITY</b>	
1. The adoption of management protocols for the hydroelectric watershed to reduce fluctuations in the lake's water level, particularly during the breeding season of phytophilic species	✓
2. Activities of monitoring and containment of invasive alien species	✓
3. Identification of lake areas to be dedicated as zones of fish repopulation, with the establishment of fishing prohibitions or areas dedicated to no-kill fishing only	✓
4. The drafting of a detailed plan of fishing management with the identification of specifically approved fishing methods as well as of usable equipment and its characteristics	✓
5. Monitoring and checks on the abundance of populations and reproductive efficiency of the main species which are of fishery and/or wildlife interest	✓
6. Repopulation with fish species of commercial fishery interest	✓
7. Reduction of the amount of nutrients deriving from point source discharge outlets through their relocation or through improvement in purification treatments	✓
8. Reduction of the nutrient load by increasing good farming practices aimed at curbing the amounts of nitrates and phosphates in widespread circulation	✓
<b>B - SUPPORTING AQUACULTURE, INCLUDING ORGANIC PRACTICES</b>	
1. Enhancement And Stimulation Of The Consumption Of Local Fish Produce	✓
<b>C - ACTIONS TO REDUCE HABITAT FRAGMENTATION AND TO MAINTAIN ECOLOGICAL AND FUNCTIONAL CORRIDORS AROUND LAKE SALTO AND LAKE TURANO</b>	
1. The Creation, Maintenance And Betterment Of The Connectivity Between The Regional Ecological Network And The Lake Environment	✓
<b>D - RESTORATION OF SPECIFIC LAKE HABITATS TO SUPPORT SUSTAINABLE FISH STOCKS</b>	
1. Reconstruction and/or creation of spawning grounds, including artificial ones, for phytophilic and lithophilic species	✓
2. Creation and placement of twig bundles and twined wood mattresses to increase spawning grounds for perch	✓
3. Re-naturalisation and/or placement under protection of portions of lake shoreline of particular interest as fish habitat	✓
4. The creation of floating islands	✓
5. Enhancing the natural features of shoreline woodlands	✓
6. Increasing the natural features of riverbank habitats	✓ (incl.in D1 and D3)
<b>E- INTERVENTIONS TO IMPROVE THE CONDITIONS AND STANDARDS OF OFFERS AND ENJOYMENT OF THE HERITAGE IN AREAS OF NATURAL BEAUTY</b>	
1. Spreading the use of ecological transportation methods on the lake: e.g. Electric-powered boats	-
2. Construction of cycle paths	-
3. Reorganisation of trail paths	-
4. Creation of connections between the two lakes	-
5. Reorganisation and construction of mooring jetties	-
6. Creation of facilitated areas with informative signposting	-
7. Renovation of existing structures	-

8. Enhancement of river banks	✓ (see D1, D3 and D5)
9. Localised and selective clearings among some tree species limited to short stretches around rest places for the enjoyment of the views	✓
10. Improvement works to facilitate road access to the areas concerned	-
11. Improvement of river areas.	✓ (see D1, D3 and D5)
<b>F. CREATION OF INNOVATIVE SERVICES AND/OR SYSTEMS FOR ENJOYMENT OF THE RESOURCES, INCLUDING THE USE OF ADVANCED TECHNOLOGIES</b>	
1. Adoption of management models for integrated exploitation of the existing regional ecological network	-
2. Definition of integrated management models for diversified use of the lakes	-
3. Development of management, easy-access and promotional software and applications	-
4. Access Point (Wi-Fi libero) and connected services.	-
<b>SYSTEM FOR INTEGRATED TOURISM DEVELOPMENT</b>	
<b>TO IMPROVE THE COMPETITIVENESS AND ATTRACTIVENESS OF TOURIST DESTINATIONS THROUGH SYSTEMATIC AND INTEGRATED ENHANCEMENT OF LOCAL RESOURCES AND CAPACITIES</b>	
1. Design creation and enhancement of the nature trails, cultural, artistic, historical and religious itineraries linked to the communities that have settled around Lake Salto and Lake Turano	-
2. Recovery of the historic, artistic and cultural heritage connected with the geographical and social transformations induced by the watershed and dam works, including the creation of a "Dam Museum"	-
3. Recovery and enhancement of the archaeological heritage and of the karstic phenomena present in the Lakes area	-
4. Design, creation and enhancement of gastronomic itineraries "Lakeside Aromas" for the promotion of produce from fisheries, woodland and the forest floor and of the lake-area mountain cultures	-
5. Bringing online itineraries between the various communities that inhabit the area of the two lakes	-
6. Promote the inflow of tourists coming from other regions and especially from Rome	-
7. Car- and bike-sharing services	-
8. Implement trekking and hiking itineraries and bridleways	-
9. Support for actions to promote and consolidate integrated offers of cultural and natural resources	-
10. Creation of internet portals, information and informative points, develop channels for promoting and promoting local offers, aiming both at selective sustainable tourism (bearing in mind that the lakes are located 70 km from Rome) as well as high-end tourism	-
11. Support for processes of aggregation and integration between businesses in creating unified offers for tourism, which may try out innovative models such as dynamic packaging, marketing networking, tourism information systems and customer relationship management	-
<b>HUMAN CAPITAL EDUCATION AND TRAINING IN THE SALTO AND TURANO VALLEYS</b>	
1. Training activities to raise competencies and qualification of the human capital for the management of innovative systems (training of personnel for the governance of Lake Salto and Lake Turano, operators in the sectors of training and management and control of assets: e.g. Park wardens, administrators, professional fishers or others with commercial activities on the lake, for farmers of the lake areas to promote less mechanised and more innovative forms of agriculture tied to local resources; training for systematic ecological services and their control)	-
2. Training activities to qualify human capital working in the tourism sector, with particular attention to the managerial and entrepreneurial skills required for improving the tourism system: training for managers of hotel and restaurant facilities, training for local	-

marketing operators; for young entrepreneurs who intend to work on the lakes with product and process innovation	
3. Actions aimed at increasing human capital in agriculture, fishery and aquaculture by means of a better definition of activities for informing, educating and consultancy, or system and support services (agro-meteorological networks, analysis centres, databases and multimedial facilities)	-
<b>DEVELOPMENT AND SUPPORT OF THE LAKE PRODUCTION CHAIN</b>	
1. Development of sectors and production chains with high growth potential or with a snowballing effect on other productive sectors	-
2. Relaunch of the readiness to invest in the productive system	-
3. Development of employment and production in local areas affected by the widespread crisis in productive activities	-
4. Support for structural and organisational improvements of agricultural, agrifood and non-food production chains	-
5. Increase in mobile informational services	-

In addition, the proposal for a **“Management Plan for Sport And Professional Fishing in Lake Salto and Lake Turano”** at the local level is presented as an outcome of the participatory process for remedying the clash of interests between professional and amateur fishers active in Lakes Salto and Turano and for safeguarding local fish fauna and the lake environment.

## 2. GUIDELINES FOR LOCAL NEEDS

### 2.1 Protecting and promoting natural assets

#### 2.1.1 *Actions aimed at the conservation and enhancement of biodiversity*

During the participatory process involving local stakeholders, a total of eight actions were identified, having the aim of conserving and enhancing biodiversity. All of these actions have been selected in developing the Guidelines.

Set out below in tabular form are details of the implementation methods for the listed actions, showing the persons or bodies charged with implementation, the required operations, time lines and expected outcomes.

A - ACTIONS AIMED AT THE CONSERVATION AND ENHANCEMENT OF BIODIVERSITY
ACTION 1
<b>The adoption of management protocols for the hydroelectric watershed to reduce fluctuations in the lake's water level, particularly during the breeding season of phytophilic species</b>
PERSON OR BODY CHARGED WITH IMPLEMENTATION
<ul style="list-style-type: none"> <li>• Manager of hydroelectric power station of Cotilia (E.On Italia S.p.A.)</li> <li>• Lazio Region</li> <li>• Province of Rieti</li> </ul>
DETAILS OF IMPLEMENTATION
<p>Most of the phytophilic fish species in the two lakes breed during the period May - July (e.g. Pike, Tench, Carp), other species of interest for commercial fishery such <i>Coregonus lavaretus</i> (freshwater whitefish), breed from December to March. During these periods, fluctuations in the water levels of the Lake Salto and Lake Turano basins may jeopardize successful breeding, especially among species that prefer to spawn in shore-side areas. Lower water levels can lead to loss of eggs or can endanger spawning, possibly by causing spawn to surface or by raising local water temperatures, as hatching is triggered by temperature changes.</p> <p>Post-hatching life-expectancies of larvae also depend on water levels. This is because, while still insufficiently developed, the larvae of many fish species have limited ranges of movement and prefer shallow or very shallow areas (5-15 centimetres). Consequently, even very small variations in water level in the post-hatching period can jeopardise larva survival.</p> <p>Furthermore, excessive surface exposure of the lakeside vegetation could endanger the survival of some species of flora, thus leading to possible loss of reproductive habitat for phytophilic fish species.</p> <p>For other species, however, one could observe an additive effect between sinking water levels and other phenomena such as, for example, concurrent sustained winds. In such cases, which are by no means rare, eggs are exposed to the action of waves generated by the winds, which wash them up onto the dry shore. Fish species such as lake whitefish, (<i>Coregonus lavaretus</i>), or <i>Alburnus arborella</i> are particularly vulnerable to such phenomena.</p> <p>Measures will therefore be taken to arrange guarantees with the management company of the two reservoirs - that, it is recalled, feed Cotilia power station - that maximum daily fluctuations in water level during the December-June period remain below 5 centimetres, and that maximum monthly fluctuations are kept below 25 centimetres. This should maintain elophyte and hydrophyte formations in the lakeside strip in good condition.</p> <p>The Table below shows the breeding periods for the principal fish species to suffer from the negative effects of lowering lake water levels. Also given are values in centimetres for the maximum daily (monthly in brackets) ranges of toleration. These factors should be considered in the correct management of population dynamics for these species (source: Volta P., <i>Indicazioni relative alla gestione dei livelli del Lago Maggiore a tutela della fauna ittica</i> ).</p>

SPECIES/FUNCTIONAL GROUP	DEC	GEN	FEB	MAR	APR	MAY	GIU	JULY	AUG	SEPT	OCT	NOV
<i>Coregonus "forma hybrida"</i>	5 (25)	5 (25)	5 (25)	5 (25)	-	-	-	-	-	-	-	-
<i>Esox lucius</i>	-	-	-	5 (20)	5 (30)	5 (30)	5 (30)	5 (30)	-	-	-	-
<i>Alburnus arborella</i>	-	-	-	-	-	10 (20)	10 (20)	-	-	-	-	-
<i>Alosa agone</i>	-	-	-	-	-	15 (50)	15 (50)	15 (50)	-	-	-	-
Phytophilic species ( <i>Cyprinus carpio</i> , <i>Tinca tinca</i> , <i>Scardinius erythrophthalmus</i> )	-	-	-	-	-	5 (30)	5 (30)	5 (30)	-	-	-	-
<b>TIMELINES</b>												
by December 2016												
<b>EXPECTED OUTCOMES</b>												
Maintenance of an adequate water level during the period of greatest vulnerability for phytophilic fish species will guarantee greater reproductive success and thus the upkeep of well-structured populations in the two watersheds - also promoting the quantity of fishery resources available to amateur and professional fishers.												

<b>A - ACTIONS AIMED AT THE CONSERVATION AND ENHANCEMENT OF BIODIVERSITY</b>
<b>ACTION 2</b>
<b>Activities of monitoring and containment of invasive alien species</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>Province of Rieti – VI Department (Environmental Department);</li> <li>Province of Rieti – I Department (Fish and Hunting Department);</li> <li>Sport Fishing Associations</li> <li>Professional Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
<p>The proliferation of invasive species of ichthyofauna induces impoverishment of lake biodiversity as the presence of species native to the lakes declines, with knock-on effects for fishery activities. Specifically, in Lakes Salto and Turano the most widespread invasive species are the common bream (<i>Abramis brama</i>) and the roach (<i>Rutilus rutilus</i>). These compete with native species at trophic level and for breeding sites.</p> <p>Invasive species may be kept down through selective catching of exemplars which may be implemented through the routine fishing activities of amateur and professional fishers alike, and by means of suitable agreements and incentives with the Province of Rieti. The fish caught could then be passed on through appropriate distribution channels.</p> <p>In order to contain the presence of a new non-native predator, the wels catfish (<i>Silurus glanis</i>), that has recently appeared in the two lakes; further incentives will also be provided in the form of cash prizes per head caught.</p> <p>The effectiveness of this operation could be verified through sampling of fish stocks conducted by the Province at two-yearly intervals.</p>
<b>TIMELINES</b>
By December 2024. At least one containment operation per year is planned, making a total of at least ten interventions.
<b>EXPECTED OUTCOMES</b>
Containment of the number of exemplars of invasive species, with possible long-term eradication of non-native species



A - ACTIONS AIMED AT THE CONSERVATION AND ENHANCEMENT OF BIODIVERSITY
<b>ACTION 3</b>
<b>Identification of lake areas to be dedicated as zones of fish repopulation, with the establishment of fishing prohibitions or areas dedicated to no-kill fishing only</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associations</li> <li>• Professional Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
<p>Because of the equipment deployed and the quantities of fish caught, professional fishing has often been seen as a threat to the ecological balance of fish populations. In fact, if suitably regulated, professional fishing can become an instrument for maintaining and safeguarding fish populations and could also provide an opportunity for reinvigorating the local economy, if the catch - or at least part of it - were to go to benefiting local restaurant establishments. The creation of no-fishing zones both for professionals and for amateurs has the dual function of alleviating the quantities of fish taken from some areas of the lake and ensuring the preservation of suitable spawning grounds for some fish species of particular value. The participatory process initiated through application of Good Practice N° 7 has led stakeholders to propose the institution of 2 'bio-recovery areas' for Lake Salto and two for Lake Turano. The locations of these areas should be the subject matter of a common proposal, to be presented jointly by the stakeholders to the provincial fisheries committee. Once the location of these sites has been approved, the Province of Rieti shall provide for a specific Resolution for a total ban on fishing in them.</p>
<b>TIMELINES</b>
By December 2014
<b>EXPECTED OUTCOMES</b>
Containment of fishery pressure on species of commercial fishery interest, and restoration of fish stocks. Safeguarding the biodiversity of lake fish species.

A - ACTIONS AIMED AT THE CONSERVATION AND ENHANCEMENT OF BIODIVERSITY
<b>ACTION 4</b>
<b>The drafting of a detailed plan of fishing management with the identification of specifically approved fishing methods as well as of usable equipment and its characteristics</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associations</li> <li>• Professional Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
<p>Through the participatory process between both sporting and professional fishery associations and the management bodies of fishing activities, an initial regulating proposal for the management of amateur and professional fishery has been identified by the local authorities for Lakes Salto and Turano, which may be summarised in the following points:</p> <ul style="list-style-type: none"> <li>• Raising the legal sizes for catches of Trout, Rudd, Carp and Eel;</li> <li>• Obligation for a fish-catch record card;</li> <li>• Establishment of no-fishing areas;</li> <li>• Regulation of the approved equipment for fishing.</li> </ul> <p>These provisions aim above all at alleviating disputes that have arisen between amateur and professional fishers operating in Lakes Salto and Turano, regarding exploitation of fishery resources.</p> <p>This plan should be approved by the Province of Rieti, becoming the Fisheries Regulation for 2015.</p>
<b>TIMELINES</b>
By December 2014
<b>EXPECTED OUTCOMES</b>
Protection of fish communities in Lake Salto and Lake Turano, increase in natural stocks, rebalancing of overall fish populations.

A - ACTIONS AIMED AT THE CONSERVATION AND ENHANCEMENT OF BIODIVERSITY
<b>ACTION 5</b>
<b>Monitoring and checks on the abundance of populations and reproductive efficiency of the main species which are of fishery and/or wildlife interest</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associations</li> <li>• Professional Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
<p>Monitoring of fish communities in the two lakes should take place by means of targeted semi-quantitative and/or quantitative sampling using electrofishing technique (for shore-loving species), or by capture and release (for pelagic species) using multi-mesh nets appropriate for the different target fish species and sizes. Segmented multi-mesh nets (MMs) are passive capture instruments, being based on the fact that a moving fish is kept enmeshed in the net-mesh size corresponding to the segmented section. Each net comprises a series of standard-sized panels, each of which has a different size of mesh so that fish of differing dimensions can be caught. MMs can be sub-divided into two categories: 'on the bed' or 'benthic' (BMMs) and 'mesopelagic', (PMMs) according to how they are set: the former being anchored and set on the bed, the latter being raised above the lake bed. The planned study methodology is based on stratified sampling of the water column and random selection of sampling sites. The number of strata, of sampling sites and the number of nets to use for each stratum are determined by the overall surface area and maximum depth of the lake. The minimum number of nets set may not, however, be lower than 16 nets per lake, of which at least eight are BMMs and eight PMMs.</p>
<b>TIMELINES</b>
by December 2020 Three monitoring campaigns are planned at two-yearly intervals (2016, 2018 and 2020).
<b>EXPECTED OUTCOMES</b>
<p>Estimate of the abundance of fish communities and definition of the population structures of target fish species            Definition of population trends based on the various annual results</p>

A - ACTIONS AIMED AT THE CONSERVATION AND ENHANCEMENT OF BIODIVERSITY
<b>ACTION 6</b>
<b>Repopulation with fish species of commercial fishery interest</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associations</li> <li>• Professional Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
<p>Annual sowing of juveniles of fish species of interest for fishery, e.g. <i>Coregonus</i>, Eel, Tench and Brown Trout, to be implemented preferably during the autumn/winter period, allowing the fish to adapt before the high season for amateur and professional fishing. The quantities and types of species to be introduced shall be defined every two years according to the results of monitoring of the fish communities, as referred to under Action 5, and shall in any case comply with the provisions of the Provincial Fishing Plan (Carta Ittica).</p> <p>In the first phase of implementation the Guidelines are provided for annual restocking of at least 150 kg of eel and 150 kg of brown trout for each lake. After the results of fish samplings, quantities and numbers of species covered by the restocking will be redefined.</p>
<b>TIMELINES</b>
by December 2020 Three monitoring campaigns are planned at two-yearly intervals (2016, 2018 and 2020); Fish restocking will be done 1 time/year
<b>EXPECTED OUTCOMES</b>
<p>Increase in stocks of fish of interest for commercial fishery, in order to reduce fishery pressure on the natural population and to allow either an increment in number or in density of target species in the lake basins.</p>

A - ACTIONS AIMED AT THE CONSERVATION AND ENHANCEMENT OF BIODIVERSITY
<b>ACTION 7</b>
<b>Reduction of the amount of nutrients deriving from point source discharge outlets through their relocation or through improvement in purification treatments</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – VI Department (Environmental Department):</li> <li>• Lazio Region - Area Authority for survey of water service infrastructures</li> <li>• Regional Agency for Environmental Protection – Lazio Region (ARPA Lazio)</li> <li>• National Authority for the River Basin of Tiber</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
Creation of a geo-specific database of discharge outlets located in Lakes Salto and Turano and their characterisation by the Province of Rieti in collaboration with the National Authority for the River Basin of Tiber. Estimate of the polluting load released into the two lakes and the creation of a pre-feasibility study for the distribution or clustering of discharge outlets into more appropriate treatment systems. This would also refer to the provisions of the Water Protection Plan for the Lazio Region (Article 21, Measures for treating effluent water, and Article 22, Measures for discharges from small built-up areas with scattered housing, isolated buildings and urban areas of fewer than 2,000 inhabitants), and to the regional regulations for the sector (Regional Government Decree 219 of 13 May 2011). In addition, monitoring of the outcomes obtained through the campaigns conducted by ARPA Lazio (the regional agency for environmental protection) could be scheduled as a 'before-and-after' comparison.
<b>TIMELINES</b>
By December 2016, creation of the geo-specific database
<b>EXPECTED OUTCOMES</b>
Reduction of the polluting load on the two lakes which undermines eutrophication processes, and improvement in the quality of surface waters

A - ACTIONS AIMED AT THE CONSERVATION AND ENHANCEMENT OF BIODIVERSITY
<b>ACTION 8</b>
<b>Reduction of the nutrient load by increasing good farming practices aimed at curbing the amounts of nitrates and phosphates in widespread circulation</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Lazio Region – Agriculture and Rural Development Department</li> <li>• Province of Rieti – VI Department (Environmental Department)</li> <li>• Regional Agency for Environmental Protection – Lazio Region (ARPA Lazio)</li> <li>• Trade associations: Farmers and Livestock Farmers</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
With regard to the provisions of the Code of Good Agricultural Practice (CBPA), as approved by the Decree of the Minister of Agricultural and Forestry Policy on 19 April 1999, application of the Code and of the provisions of (European, national and regional) regulations for the sector should be monitored by the Province in collaboration with the professional associations. Evaluation of the application of Good Practices may be conducted by means of agreements made with the trade associations for the production of specific reports. In addition, monitoring of the outcomes obtained through the campaigns conducted by ARPA Lazio (the regional agency for environmental protection) could be scheduled as a 'before-and-after' comparison.
<b>TIMELINES</b>
Multi-year action to be carried out for at least 8 years. Monitoring will be biennial.
<b>EXPECTED OUTCOMES</b>
Reduction of the polluting load on the two lakes which undermines eutrophication processes, and improvement in the quality of surface waters

### 2.1.2 Supporting aquaculture, including organic practices

One action for supporting aquaculture practices, including organic methods, was identified during the participatory process with local stakeholders. Guidelines for this action are being developed.

Set out below in tabular form are details of the implementation methods for the listed action, showing the persons or bodies charged its implementation, the required operations, time lines and expected outcomes.

<b>B- SUPPORTING AQUACULTURE, INCLUDING ORGANIC PRACTICES</b>
<b>ACTION 1</b>
<b>Enhancement and stimulation of the consumption of local fish produce</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – VI Department (Environmental Department)</li> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associations</li> <li>• Professional Fishing Associations</li> <li>• CCIAA – Chamber of Commerce and Industry</li> <li>• Trade Associations: Tourism, Retailing, Catering Services</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
<p>Creation of a type trademark for fish produce from Lakes Salto and Turano (D.O.P.), with its own logo, and the subsequent creation of advertising and informative material about the initiative. Such acknowledgement will enable fishery produce from the two lakes to be immediately recognisable, adding to its attributed value and boosting market opportunities by placing it in a distribution chain whose quality has national and international acknowledgement.</p> <p>This protected designation of origin (D.O.P.) is, in fact, a legally protected trademark for the designation, which is assigned by the European Union to food products whose special qualitative characteristics depend essentially or exclusively on the local area in which they are produced. The geographical environment includes both natural factors (climate, environmental features) and human factors, (production techniques passed down over time, handicrafts, and traditional knowledge). When combined, these factors offer products that cannot be imitated beyond a given area of production.</p> <p>D.O.P. fish products have to meet the requirements defined by a specific production protocol (pursuant to Article 4,1 of CE Regulation N° 510/2006), specifying the following items: identification of the type of D.O.P., morphological characteristics, area of production, type of labelling.</p> <p>Provisions will be made to create gastronomic itineraries and overnight stays, (also creating themed recipes), with information and publicity points to promote the quality product. These will be effected by means of agreements with trade associations, prizes and tax incentives for those taking part in the initiatives.</p>
<b>TIMELINES</b>
By December 2016.
<b>EXPECTED OUTCOMES</b>
Increase in consumption of typical local produce with an increase in demand for and valuation of typical local produce

### 2.1.3 Actions to reduce habitat fragmentation and to maintain ecological and functional corridors around lake salto and lake turano

One supporting action aimed at protecting connectivity between the lakes of the identified partner regions was identified during the participatory process involving local stakeholders.

Set out below in tabular form are details of the implementation methods for the listed action, showing the persons or bodies charged its implementation, the required operations, time lines and expected outcomes.

<b>C - ACTIONS TO REDUCE HABITAT FRAGMENTATION AND TO MAINTAIN ECOLOGICAL AND FUNCTIONAL CORRIDORS AROUND LAKE SALTO AND LAKE TURANO</b>
<b>ACTION 1</b>
<b>The creation, maintenance and betterment of the connectivity between the regional ecological network and the lake environment</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Lazio Region</li> <li>• Province of Rieti – VI Department (Environmental Department)</li> <li>• lakeside municipalities</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
<p>Preparation of a regional project in coordination with the Province of Rieti and lakeside municipalities, of software-aided analysis using GIS (Geographical Information System) programs to analyse the structure of the regional ecological network, of which the two lakes of Salto and Turano constitute a focal point.</p> <p>The analysis will be conducted using the 'FRAGM' model to identify existing ecological connections, corridors and core areas as well as the level of fragmentation of the ecological network in the area under study.</p> <p>Such analysis will enable subsequent planning for interventions to increase/improve regional ecological networks. Using GIS software, to be supported by specific field-study measurements, it will be possible to draw up a precise schedule of interventions for increasing, improving or preserving the ecological corridors feeding into the lakes.</p>
<b>TIMELINES</b>
<p>Local-area analysis of ecological networks using the FRAGM model by December 2016</p> <p>Preliminary scheduling of reconnection interventions: by December 2017</p>
<b>EXPECTED OUTCOMES</b>
<p>Identification of points of discontinuity within the existing ecological network feeding into the two lakes with a view to future improvements in regional and local ecological connectivity, with a general increase in the biodiversity, stability and resilience of lake ecosystems</p>

#### **2.1.4 Restoration of specific lake habitats to support sustainable fish stocks**

Six actions for restoring lake habitats and supporting sustainable fish stocks in the lakes of identified partner regions were ascertained during the process involving local stakeholders. Guidelines are to be developed for five of the six interventions, while Action 6 may be attributed to the set of actions already developed, for which reason no specific guideline will be developed for it. Set out below in tabular form are details of the implementation methods for the listed action, showing the persons or bodies charged its implementation, the required operations, time lines and expected outcomes.

<b>D- RESTORATION OF SPECIFIC LAKE HABITATS TO SUPPORT SUSTAINABLE FISH STOCKS</b>
<b>ACTION 1</b>
<b>Reconstruction and/or creation of spawning grounds, including artificial ones, for phytophilic and lithophilic species</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – VI Department (Environmental Department)</li> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> </ul>

- Sport Fishing Associations
- Professional Fishing Associations
- lakeside municipalities

#### DETAILS OF IMPLEMENTATION

The action will be implemented, for lithophil species, by laying spawning grounds along the suitable stretches of shore, by the Province of Rieti in collaboration with the fishing associations, before the breeding season of the lithophil species, with the deposit of gravel grounds and accommodation in target sites. The action will also provide for manual cleaning and periodic existing gravel beds. The target species for this type of intervention is the Bleak, but also the Chub can use these artificial gravel beds.

The quantities of material to be laid, as estimated from similar interventions made with good results from the late 90s on Lake Como, are averaged. 10-15 m<sup>3</sup> of gravel / site to surfaces of at least 10 m / site. The thickness of the gravel bed (diameter 2-4 cm) must be at least 15 cm and the depth at which realize the interventions must be preferably comprised between 30 and 150 cm.

In seasons more favourable on the spawning grounds, Bleak's eggs can reach very high densities, up to 2000 units per square decimeter of gravel (source: Provincia di Como, 2003). Installation can be done from shore or by barges with use of mechanical shovel or manually depending on the sites select them and of the quantities needed.

The maintenance of artificial spawning grounds requires cleaning and removal of the vegetational substrate and terrigenous deposits outside of the breeding season by mopping, so as to facilitate the use by the target species.

**Figure 1: Mechanical installation of spawning beds (on the left) (fonte: Provincia di Como, 2003) and manual installation and maintenance (on the right) (www.comitatocentroadda.it)**



The operation of realization of artificial spawning grounds in littoral areas, can also be implemented through laying of plastic crates of 30X50 cm then filled with a layer of gravel of 5 cm thickness. This step can then be followed by the transfer of the plastic crates, once there is occurred the deposition of eggs, in enclosed areas for protecting eggs and larvae from predation.

**Figure 2: Installation of the plastic crates and (eventually) of the fence protection (source: AA.VV. 2011 – Quaderni della ricerca n. 125 - Regione Lombardia)**



Interventions will take place mostly for phytophilic fish species (Pike; Tench; Common carp), with the reconstruction of reeds in a state of decay or disappeared along the shores of the lakes: the reconstruction involves the laying of living palisade, bentonite bed and bands of *Phragmites australis*, or construction of willow riparian (by green protection) for

stabilization of the banks and start natural recolonization by the reeds.

**Figure 3: Riparian restoring action with living palisade and laying of reed bed (source: Aimone, 2014)**



The laying of reeds can also be done directly on the waterfront, along the euphotic zone. These interventions will take place where there are no stability problems of the banks and where the banks have a slight slope, therefore suitable to host reed bed. In this case clods of reeds can be laid directly along the banks. Macrophytes then spontaneously tend to colonize the sub-band shoreline to a depth suitable for its survival (up to 1 meter). The clods of reeds must be laid with a dense planting scheme (max 50X50 cm) proceeding from the edge of the escarpment towards the shore.

In case of use of adult plants, these have to be transferred before the growing season, after cutting height of 10-15 cm from the ground, to facilitate the settlement.

In the event of instability of the banks, they must be used clods coated in coconut networks to form a roller and anchored by poles with a distance not greater than 2 m. Vegetative growth of the reed is, in both cases, very fast.

**Figure 4: Reed installation with clods (on the left) and installation of reed coconut rollers (on the right) (source: AA.VV. 2011 – Quaderni della ricerca n. 125 - Regione Lombardia)**




**TIMELINES**

By December 2017.

**EXPECTED OUTCOMES**

Increase in natural fish stocks of interest for fishery and/or conservation. Protection of the banks against erosion  
Safeguarding the biodiversity of lake fish species

<b>D- RESTORATION OF SPECIFIC LAKE HABITATS TO SUPPORT SUSTAINABLE FISH STOCKS</b>
<b>ACTION 2</b>
<b>Creation and placement of twig bundles and twined wood mattresses to increase spawning grounds for perch</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – VI Department (Environmental Department)</li> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associations</li> <li>• Professional Fishing Associations</li> <li>• lakeside municipalities</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
<p>The creation and placement of twig bundles and twined wood mattresses increases suitable breeding areas for phytophilic fish species that lay adhesive eggs on the aquatic vegetation.</p> <p>These interventions are particularly effective for Perch, which lays long strands of adhesive eggs on aquatic vegetation, and consist of the laying of 60-100 wooden bundles for each site identified (10-15 sites) before the breeding period of the target species. The overall diameter of the individual bundles must be 50-60 cm and the length of ca. 2 m, the weight of ca. 20 kg. The bundles must be made heavier and bound inside (2-3 ligatures) by iron rods and / or inert bodies concrete to bind to each other through steel chains, to prevent unthreading of the same bundle. Some weights can be used to ensure adherence to the bottom. The laying of the bundles has to be made for overlapping layers in orthogonal arrangement between them.</p> <p>The installation depth must be optimal for the deposition of the eggs strands of the Perch (between 1.5 and 10 m) and must occur in sites where there is a lack of natural macrophytes.</p> <p>Site selection for the implementation of interventions will take place through a campaign of measurements taken in the field. Implementation will be performed by the Province of Rieti through agreements reached with the fishing associations.</p> <p><b>Figure 5: Placement of twig bundles (on the left) and their arrangement on lake bottom (on the bottom)</b> (source: AA.VV. 2011 – Quaderni della ricerca n. 125 - Regione Lombardia)</p>

<b>TIMELINES</b>
By December 2017.
<b>EXPECTED OUTCOMES</b>
Increase in natural fish stocks of interest for fishery and/or conservation.



D- RESTORATION OF SPECIFIC LAKE HABITATS TO SUPPORT SUSTAINABLE FISH STOCKS
ACTION 3
<b>Re-naturalisation and/or placement under protection of portions of lake shoreline of particular interest as fish habitat</b>
PERSON OR BODY CHARGED WITH IMPLEMENTATION
<ul style="list-style-type: none"> <li>• Province of Rieti – VI Department (Environmental Department)</li> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associations</li> <li>• Professional Fishing Associations</li> </ul>
DETAILS OF IMPLEMENTATION
In the areas identified as 'bio-recovery areas' through the participatory process initiated in applying Good Practice N° 7 (two sites for Lake Salto and two for Lake Turano), a ban on swimming and water-borne tourism should also be imposed in order to alleviate the direct pressure of human activity. In these zones, naturalistic engineering interventions should be carried out along the lakeshores (e.g. the laying of brushwood or 're-greened' pilings along the banks) to increase their suitability as breeding grounds for fish species of commercial or nature conservation interest.
TIMELINES
By December 2015
EXPECTED OUTCOMES
Increase in natural fish stocks of interest for fishery and/or conservation Protection of the banks against erosion Safeguarding the biodiversity of lake fish species

D- RESTORATION OF SPECIFIC LAKE HABITATS TO SUPPORT SUSTAINABLE FISH STOCKS
ACTION 4
<b>Creation of floating islands</b>
PERSON OR BODY CHARGED WITH IMPLEMENTATION
<ul style="list-style-type: none"> <li>• Province of Rieti – VI Department (Environmental Department)</li> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associations</li> <li>• Professional Fishing Associations</li> </ul>
DETAILS OF IMPLEMENTATION
<p>Interventions will take place to increase suitable breeding areas for phytophilic fish species or for aquatic avifauna, such as the creation of 'floating isles' constructed out of pre-vegetated floating biomats of twined reed, or double-meshed biomats that can be covered in gravel.</p> <p>Some fish species of commercial fishery or conservation interest; (e.g. Pike, Tench, Carp and Whitefish) may use these 'islands' to deposit their spawn in their submerged rhizomatous layers, where there will also be a high level of water-oxygenation to promote a higher rate of larval development. Islands may also be used for shelter.</p> <p>Meanwhile, some species of aquatic avifauna may use the surface part as a nesting ground, resting place or as shelter (<i>Anatidae</i>, <i>Sternidae</i>, <i>Laridae</i> etc.)</p> <p>The islands are constructed out of triangles in stainless steel or synthetic material (of side 2.5 to 5.8 m and area of between 3 and 17 m<sup>2</sup>). These support a hard-wearing, UV-stabilised mesh that forms bedding for the plants, which are pre-cultivated in the area of cultivation. Re-greening is carried out just before the floating island is launched onto the water. In the case of gravel-covered mats, the mesh is doubled with an additional vegetable or geotextile interlayer, onto which the inert material is then placed. The islands are anchored to the lake bed using boulder- or stone-filled sacks and suitable ties.</p> <p>The pre-cultivated species of vegetation to be planted on the islands (biomats of coconut fibre or single plants) will be chosen from native plants typical of the lake basins concerned (e.g. marsh sedge or cane). Plant density in the pre-cultivated layers is of approx. 15-20 plants/m<sup>2</sup>.</p> <p><b>Figure 6: Floating Islands: vegetated (left) or covered in gravel (right) (source: <a href="http://www.bestmann-green-systems.de">www.bestmann-green-systems.de</a>)</b></p>



These floating islands also perform an important phytodepurative function through the considerable micro-organism growth in their submerged rhizomatous component, which is able to accumulate substantial amounts of heavy metals in its root system. The growth of this vegetation is in fact very rapid, (up to 2m over a vegetative cycle in hypertrophic waters) and development of the root layer is therefore very lush and deep (1m in length), providing a colonisation bed for substantial quantities of aquatic micro-organisms, which work to remove pollutants from the water. In cases of application, a surface area of 300 m<sup>2</sup> of vegetated islands provided approx. 30,000 m<sup>2</sup> of surface suitable for the development of aquatic micro-organisms, whereby their density reached up to 5,000 individuals per cm<sup>2</sup>.

The islands' ease of maintenance, with removal of the vegetation where pollutants have accumulated, makes their purifying function still more efficient.

Site selection for the implementation of interventions will take place through a campaign of measurements taken in the field. Implementation will be performed by the Province of Rieti through agreements reached with the fishing associations.

**Figure 7: Maintenance of vegetated islands (source: www.bestmann-green-systems.de)**



**TIMELINES**

By December 2016.

**EXPECTED OUTCOMES**

Increase in the surface areas suitable as breeding grounds for phytophilic fish species and aquatic avifauna  
Improvement in quality of lake waters thanks to the islands' phytodepurative action.

**D- RESTORATION OF SPECIFIC LAKE HABITATS TO SUPPORT SUSTAINABLE FISH STOCKS**

**ACTION 5**

**Enhancing the natural features of riparian woodlands**

**PERSON OR BODY CHARGED WITH IMPLEMENTATION**

- Province of Rieti – VI Department (Environmental Department)
- Province of Rieti – I Department (Fish and Hunting Department);
- Italian Rangers Corps
- Lazio Region – Regional Forestry Services

**DETAILS OF IMPLEMENTATION**

Interventions should be scheduled to improve the structure of riparian woodland through the removal of alien invasive

specimens (e.g. false acacia, ailanthus or <i>Amorpha fruticosa</i> ), or through containment by means of selective felling to preserve and create conditions for greater spread and cover by native species. Plans should also be drawn up for the planting-out of native riparian species to increase their cover and to curb the development of alien species. Site selection for the implementation of interventions will take place through a campaign of measurements taken in the field. These interventions will be implemented by the Regional Forestry Services, in collaboration with the Province of Rieti.
<b>TIMELINES</b>
Scheduling of interventions by December 2016
<b>EXPECTED OUTCOMES</b>
Increase in the bio-filter function of the riparian zone, increase in the landscape value of the lake riparian woodland, increase in the conservation value of the riparian woodland with an increase in biodiversity among the fauna it supports. Restoration of the ecological continuity of the riparian woodland. Greater stabilisation of banks and containment of hydro-geological risk

<b>D- RESTORATION OF SPECIFIC LAKE HABITATS TO SUPPORT SUSTAINABLE FISH STOCKS</b>
<b>ACTION 6</b>
<b>Increasing the natural features of riverbank habitats</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
See actions D1 e D3.
<b>DETAILS OF IMPLEMENTATION</b>
See actions D1 e D3.
<b>TIMELINES</b>
See actions D1 e D3.
<b>EXPECTED OUTCOMES</b>
See actions D1 e D3.

### ***2.1.5 Interventions to improve the conditions and standards of offers and enjoyment of the heritage in areas of natural beauty***

During the participatory process involving local stakeholders, 11 actions were identified for improving the conditions and standards of offers and enjoyment of natural heritage in the lake areas of partner regions. This document develops guidelines for three of the actions indicated. Two of these, Action 8 and Action 11, may come under the ambit of the actions already discussed above.

Set out below in tabular form are details of the implementation methods for the listed action, showing the persons or bodies charged its implementation, the required operations, time lines and expected outcomes.

<b>E- INTERVENTIONS TO IMPROVE THE CONDITIONS AND STANDARDS OF OFFERS AND ENJOYMENT OF THE HERITAGE IN AREAS OF NATURAL BEAUTY</b>
<b>ACTION 8</b>
<b>Enhancement of river banks</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>

See actions D1, D3 e D5
<b>DETAILS OF IMPLEMENTATION</b>
See actions D1, D3 e D5
<b>TIMELINES</b>
See actions D1, D3 e D5
<b>EXPECTED OUTCOMES</b>
See actions D1, D3 e D5

<b>E- INTERVENTIONS TO IMPROVE THE CONDITIONS AND STANDARDS OF OFFERS AND ENJOYMENT OF THE HERITAGE IN AREAS OF NATURAL BEAUTY</b>
<b>ACTION 9</b>
<b>Localised and selective clearings among some tree species limited to short stretches around rest places for the enjoyment of the views</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – VI Department (Environmental Department)</li> <li>• Italian Rangers Corps</li> <li>• Lazio Region – Regional Forestry Services</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
Selective felling interventions will be conducted on tree species of lower conservation value, corresponding to existing rest places, in order to improve panoramic views over the lake basins. In this way, preferential rest areas will be created that protect the remaining lakeside perimeter from excessive pressure of tourism. This intervention will be implemented by the Environmental Department of the Province of Rieti in collaboration with the Regional Forestry Services.
<b>TIMELINES</b>
By December 2015
<b>EXPECTED OUTCOMES</b>
Improvement to tourist-leisure use of the lake basins Containment of invasive species

<b>E- INTERVENTIONS TO IMPROVE THE CONDITIONS AND STANDARDS OF OFFERS AND ENJOYMENT OF THE HERITAGE IN AREAS OF NATURAL BEAUTY</b>
<b>ACTION 11</b>
<b>Improvement of river areas.</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
See actions D1, D3 e D5
<b>DETAILS OF IMPLEMENTATION</b>
See actions D1, D3 e D5
<b>TIMELINES</b>
See actions D1, D3 e D5
<b>EXPECTED OUTCOMES</b>
See actions D1, D3 e D5

### **3. GUIDELINES FOR MANAGEMENT PLAN FOR SPORT AND PROFESSIONAL FISHING IN LAKE SALTO AND LAKE TURANO**

The participation process with stakeholders for the fishery sector led to the development of a proposed “**Management Plan for Sport And Professional Fishing in Lake Salto and Lake Turano**” at the local level to remedy the clash of interests between professional and amateur fishers active in Lakes Salto and Turano and to safeguard local fish fauna and the lake environment.

Four actions were identified from the modification proposal for Lakes Salto and Turano:

- raising the legal sizes for catches of Trout, Rudd, Carp and Eel;
- obligation for a fish-catch record card;
- establishment of no-fishing areas;
- regulation of the approved equipment for fishing.

The “**Management Plan for Sport And Professional Fishing in Lake Salto and Lake Turano**” was approved by the Provincial Fishing Council on December 15, 2014.

Below guidelines for the identified actions are subdivided into:

- Sport fishing dilettantistica
- Professional fishing

#### **3.1 Sport fishing**

Set out below in tabular form are details of the implementation methods for the four actions listed in the proposed modification of the fisheries regulation for **amateur fishing**, showing the persons or bodies charged with implementation, the required operations, time lines and expected outcomes.

SPORT FISHING
ACTION 1
<b>Raising the legal sizes for catches of Trout, Rudd, Carp and Eel</b>
PERSON OR BODY CHARGED WITH IMPLEMENTATION
<ul style="list-style-type: none"> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associatons</li> </ul>
DETAILS OF IMPLEMENTATION
Integration in the annual Fisheries Regulation of the following minimum catch dimensions for the species listed: <ul style="list-style-type: none"> <li>• Pike (<i>Esox lucius</i>): from 30 to 70 cm (already in force since 2014!)</li> <li>• European perch (<i>Perca fluviatilis</i>) : 18 cm</li> <li>• Tench (<i>Tinca tinca</i>): from 20 to 30 cm;</li> </ul>

<ul style="list-style-type: none"> <li>• Common carp (<i>Cyprinus carpio</i>): from 25 to 40 cm;</li> <li>• Eel (<i>Anguilla anguilla</i>): from 25 to 40 cm.</li> </ul>
<b>TIMELINES</b>
By December 2014.
<b>EXPECTED OUTCOMES</b>
Increase in the level of safeguarding for the species of interest for commercial fishery: Pike; European perch; Tench; Common carp; Eel. Increase in the populations of the listed species

<b>SPORT FISHING</b>
<b>ACTION 2</b>
<b>Obligation For A Fish-Catch Record Card</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associatons</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
Introduction in the annual Fisheries Regulation of the obligation of a Catch-Record Card for amateur sports fishers, which is dedicated specifically to the lakes, with subdivision of the catches for water body: river or lake.
<b>TIMELINES</b>
By December 2014.
<b>EXPECTED OUTCOMES</b>
Monitoring of the quantity and type of catch in each body of water affected and of the effectiveness of the safeguarding measures undertaken

<b>SPORT FISHING</b>
<b>ACTION 3</b>
<b>Establishment of no-fishing areas</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>• Province of Rieti – I Department (Fish and Hunting Department);</li> <li>• Sport Fishing Associatons</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
Institution of 2 “no-fishing zones” intended as ‘bio-recovery areas’ for Lake Salto and 2 for Lake Turano where both amateur and professional fishing is totally banned.
<b>TIMELINES</b>
By December 2014.
<b>EXPECTED OUTCOMES</b>
Reduction of fishery pressure in some lake areas dedicated more to the reproduction of fish species of interest for fishery and/or conservation. Increase in the populations of the listed species

<b>SPORT FISHING</b>
<b>ACTION 4</b>
<b>Regulation of the approved equipment for fishing: ban on the use of pivot-balance nets</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>

<ul style="list-style-type: none"> <li>Province of Rieti – I Department (Fish and Hunting Department);</li> <li>Sport Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
Integration in the annual Fisheries Regulation of the ban on the use of pivot-balance nets. This tool enables the operator to make large catches in short time spans, is to forestall the risk of over-fishing, effectively creating an imbalance in the fish community.
<b>TIMELINES</b>
By December 2014.
<b>EXPECTED OUTCOMES</b>
Containment of the risk of overfishing of some species of interest for commercial fishery

### 3.2 Professional Fishing

Set out below in tabular form are details of the implementation methods for the four actions listed in the proposed modification of the fisheries regulation for **professional fishing**, showing the persons or bodies charged with implementation, the required operations, time lines and expected outcomes.

<b>PROFESSIONAL FISHING</b>
<b>ACTION 1</b>
<b>Raising the legal sizes for catches of Trout, Rudd, Carp and Eel</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>Province of Rieti – I Department (Fish and Hunting Department);</li> <li>Professional Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
Integration in the annual Fisheries Regulation of the following minimum catch dimensions for the species listed: <ul style="list-style-type: none"> <li>Pike (<i>Esox lucius</i>): from 30 to 70 cm (already in force since 2014!)</li> <li>European perch (<i>Perca fluviatilis</i>): 18 cm</li> <li>Tench (<i>Tinca tinca</i>): from 20 to 30 cm;</li> <li>Common carp (<i>Cyprinus carpio</i>): from 25 to 40 cm;</li> <li>Eel (<i>Anguilla anguilla</i>): from 25 to 40 cm.</li> </ul>
<b>TIMELINES</b>
By December 2014.
<b>EXPECTED OUTCOMES</b>
Increase in the level of safeguarding for the species of interest for commercial fishery: Pike; European perch; Tench; Common carp; Eel. Increase in the populations of the listed species

<b>PROFESSIONAL FISHING</b>
<b>ACTION 2</b>
<b>Setting up a catch database</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>Province of Rieti – I Department (Fish and Hunting Department);</li> </ul>

<ul style="list-style-type: none"> <li>Professional Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
Obligation of the monitoring of the catch by commercial fishermen will be established. Monitoring of the catch by professionals has proven indispensable in the management of fish resources. For this reason, it is planned to institute a provincial database. This database will be fed by the monthly catch data supplied by professional fishers who will note down their catches in the forms supplied by the Province. Totals will be transmitted at the end of the year.
<b>TIMELINES</b>
By December 2015.
<b>EXPECTED OUTCOMES</b>
Monitoring of the quantity and type of catch in each body of water affected and of the effectiveness of the safeguarding measures undertaken

<b>PROFESSIONAL FISHING</b>
<b>ACTION 3</b>
<b>Establishment of no-fishing areas</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>Province of Rieti – I Department (Fish and Hunting Department);</li> <li>Professional Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
Institution of 2 “no-fishing zones” intended as ‘bio-recovery areas’ for Lake Salto and 2 for Lake Turano where both amateur and professional fishing is totally banned.
<b>TIMELINES</b>
By December 2014.
<b>EXPECTED OUTCOMES</b>
Reduction of fishery pressure in some lake areas dedicated more to the reproduction of fish species of interest for fishery and/or conservation. Increase in the populations of the listed species

<b>PROFESSIONAL FISHING</b>
<b>ACTION 4</b>
<b>Regulation of the approved equipment for fishing.</b>
<b>PERSON OR BODY CHARGED WITH IMPLEMENTATION</b>
<ul style="list-style-type: none"> <li>Province of Rieti – I Department (Fish and Hunting Department);</li> <li>Professional Fishing Associations</li> </ul>
<b>DETAILS OF IMPLEMENTATION</b>
<p>Integration in the annual Fisheries Regulation of the following equipment regulation.</p> <p>Professional fishing should be permitted using the following equipment:</p> <p>1. Standing, free-hanging nets known in Italian as “altana (or oltana)” nets for coregonids</p> <p>Description: a vertical net of various mesh dimensions, held upright by floats which can also function as marker buoys, and kept spread taught by metal rings or leaded line attached to its lower margin. It is used anchored or free, but may not be in contact with the lake bed.</p> <p>mesh side: not less than 35 mm  maximum height of net: 8 m  maximum length of net: 35 m  maximum overall length: 900 m</p> <p>2. Bottom-set nets</p> <p>Description: a vertical net of various mesh dimensions, held upright by cork floats - or buoyant rope - and weighted along the bottom margin by rings or leaded line to keep it in place. Used mainly for catching European perch.</p>



mesh side: not less than 25 mm  
 maximum height of net: 2 m  
 maximum length of net: 25 m  
 maximum overall length: 900 m

3. Vertical long line for eels

Description: a fish line furnished with multiple hooks-

The use of a fish line armed with a maximum of 250 hooks is permitted - rather than lines without limitations on hook numbers.

4. Bertovello or cocullo (cone-shaped net)

Description: this is a net used for catching species at the bed of the lake.

It is permitted with the same characteristics already provided for in applicable regional (Law n. 87/1990) regulations on fishing

**TIMELINES**

By December 2014.

**EXPECTED OUTCOMES**

Containment of the risk of overfishing of some species of interest for commercial fishery

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