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Istituto Superiore per la Protezione
e la Ricerca Ambientale



European Union Network for
the Implementation and Enforcement
of Environmental Law

IMPEL CAED Project

The role of ISPRA in the ELD enforcement in Italy

**WEBINAR on
ENVIROMENTAL LIABILITY DIRECTIVE (ELD) ENFORCMENT
April 27th 2022**

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European Union Network for the Implementation
and Enforcement of Environmental Law

IMPEL CAED - ENVIROMENTAL LIABILITY DIRECTIVE (ELD) ENFORCMENT

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The environmental damage in the Italian legal system

1986

In '86 a legal system devoted to the reparation of the environmental damage (law 349/1986) was introduced, concerned as pure environmental damage regardless of traditional (economic, moral, etc.) damages suffered by private or public subjects.

The law 349/1986 provided for a “by fault” system of responsibility that operates when occur all the following circumstances:

- the liable subject trained an activity in violation of law or acts enacted by law,
- the activity compromised the environment, destroying, deteriorating or altering the natural resources (soil, water bodies, atmosphere, habitat, living species, landscape, ecosystems, etc.)

Reparation of the damage by the recovery of the “status quo ante” or by an economic compensation if the recovery resulted totally or partially impossible. This compensation could be evaluated by a judgment based on equitable terms, considering special criteria as, for instance, the theoretical cost of the recovery or the incomes obtained by the illegal activity.



1999



With reference to soils and ground-waters, the DM 471/99 (“law of contaminated sites”) set up, since the end of ‘90, specific limit values of contamination to prevent risks for the human health and for the environment.

Whoever exceeds the limit values, even accidentally and by a legal activity, is obliged to set an enquiry about the site contamination, also by risk-assessment procedures, to realize preventive measures for emergency situations and, where an unacceptable risk exists, to remediate the contaminated site.

Almost equivalent to “damage to land” definition in the ELD

2006



Decree 152/2006 (ENVIRONMENTAL CODE): groups together all the environmental rules into a single legislative act.

The law 349/1986 has been replaced by the Part VI of Decree 152/2006 which introduced a new legal system frame in the sector of the environmental damages **implementing the Directive 2004/35/CEE.**

Ministry for the Environment (now called Ministry for the ecological transition) was designated as competent authority



The role of ISPRA



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By many years the assessment of the environmental damage and has been delegated to ISPRA, that assures its technical and scientific support to the Ministry.

The implementation of the ELD deeply modified the work of ISPRA

before...

Environmental damage: any degree of deterioration of any natural resource

assessment mainly conducted through the analysis of the results of judicial investigations or based on the declaration of the court judgment

Only primary remediation of the damage also achievable through monetary compensation

ELD implementation

after...

Environmental damage: significant and measurable adverse affect on specific «reference concepts» for three categories of natural resources

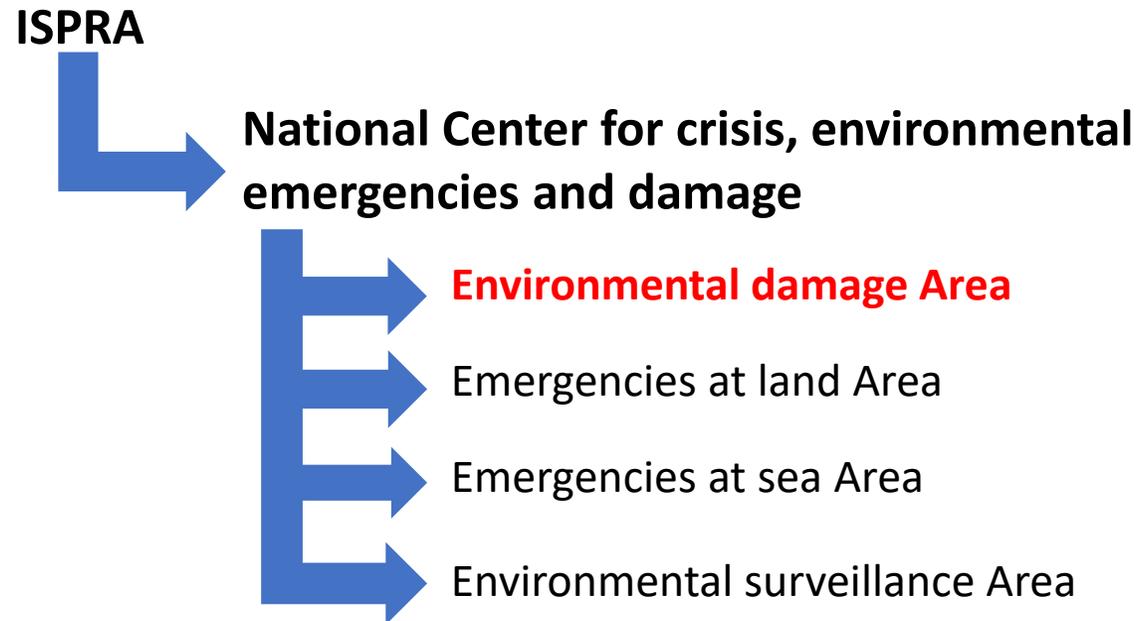
assessment requires knowledge of the baseline condition and the exact quantification of the damage

Primary, complementary and compensatory remediation to be effectively adopted



2017: a new starting point...

Reorganization of ISPRA



Institution of SNPA (law 132/2016)



In 2017 the law 132/2016 was enforced, which created a national network system for the protection of the environment (SNPA). The network includes ISPRA, as a reference point for the national environmental policies, and 21 Environmental Regional Agencies (ARPA / APPA)

One of the tasks of the SNPA is supporting the competent authority in the assessment of the environmental damage



Concrete actions ...

Creation of the ISPRA Operative Network for the environmental damage

technicians and researchers of ISPRA with expertise in natural resources and anthropic pressures

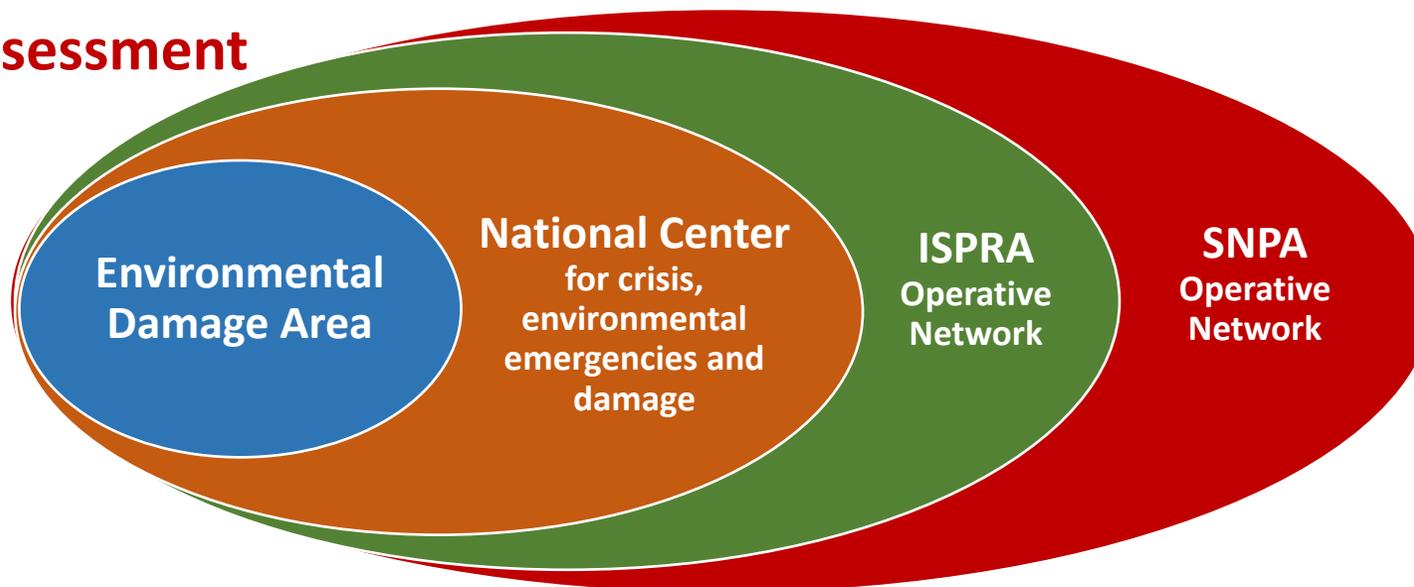
Creation of the SNPA Operative Network for the environmental damage

- representatives of Regional Environmental Agencies
- **SNPA Deliberation n. 58/2019**
defining the procedures the environmental damage assessment as part of the SNPA activity and ensuring consultation between ISPRA and the Regional Agencies

A Network System for the environmental damage assessment

Ministry for the Ecological Transition - Environmental Damage Division

requires technical support



Concrete actions ...

Training project

(run by ISPRA - Environmental Damage Area)

Regional Agencies need specific training on the legislation and technical requirements for environmental damage assessment and remediation



- Periodic training course organized at ISPRA (biannual)
- Training courses held at the Regional Agencies offices

ISPRA Report on activity for environmental damage assessment

It is not only a report of ELD cases in Italy



- The preparation of the first report was preceded by the dissemination of a questionnaire to probe the aspects of greatest interest to stakeholders
- It is a useful tool for promoting knowledge of the basic principles of national environmental damage legislation and the implementation of the EU directive, its issues and perspectives
- The data shown concern all the cases investigated by ISPRA/SNPA (ELD cases and not-ELD cases) in order to focus on the main environmental criticalities



Concrete actions ...

SNPA Guidelines: Methods and reference criteria for the assessment of the environmental damage



2021

Describes the procedural steps of the administrative action of the competent authority

Reference document for the screening and the ascertainment phases of environmental damage assessment

Introduces the notions of “clues” and “evidences” of environmental damage referred to the specific natural resources.

Other activity

- Participation to most important Italian conferences (environmental, industrial, remediation technology sectors)
- Publication of papers on specialized journals
- Discussions and collaborations with other ELD stakeholders (insurance companies)



Main results ...

Response time

The definition of procedures allows to ensure support in a reasonable time, compatible with the administrative procedure terms of the Competent Authority or the procedural terms of a court (an average of 60 days for ELD cases requiring specific investigation for the assessment of the significance of the adverse affect)

Large group of specialists

having uniform criteria for the environmental damage assessment and direct knowledge of the local issues → key aspect for the remedial measure design
(environmental issues, planning and management tools of the territory, ...)

The strengthening of the administrative procedure

- Promoting interest in environmental damage regulation
+
- Accurate ascertainment of damage based on a technical and scientific assessment → make the actions of the competent authority more efficient



A secondary result... but no less important

In recent years ISPRA analysed a large number of cases **70-100 cases/year**

(Criminal proceedings for environmental offences, observations submitted by natural or legal persons, ...)

1st step: screening → Just a few cases are ELD cases requiring assessment of the damage... but **many of them indicate environmental critical issues** regarding of:

- Waste management
- Brownfield sites
- Non-compliant water discharges
- etc.

The relevance of the screening activity

The identification of the most serious cases allows the Ministry to initiate a dialogue with local authorities aiming to verify the implementation of other environmental procedures and regulations and to promote the solution of the environmental problems.



A case of environmental damage to protected habitat

Description of facts

The managers of an industrial plant were accused of illegally depositing residual waste on a natural area for many years.

About 5 million tons of waste have been accumulated along the edge of a ravine

Frequent landslides of waste have caused over time a deep morphological modification of the site and the destruction of the vegetation



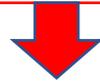
The site



- **Regional Natural Park**
- **Natura 2000 site: Special Areas of Conservation, Special Protected Area «Area delle gravine»**
- **Habitat 9540 Directive 92/43/CE «Mediterranean pine forests with endemic Mesogean pines»**

The damage assessment presented some difficulties:

- Difficulty accessing the site
- **Data from european or national report refers to time-space scale that did not permit a comparison with impact at local scale**



A specific investigation of the impact on the protected habitat was necessary

The collaboration between ISPRA and ARPA Puglia resulted in a complex analysis consisting of three phases:

Available territorial information analysis and processing (bibliography, GIS DATA)

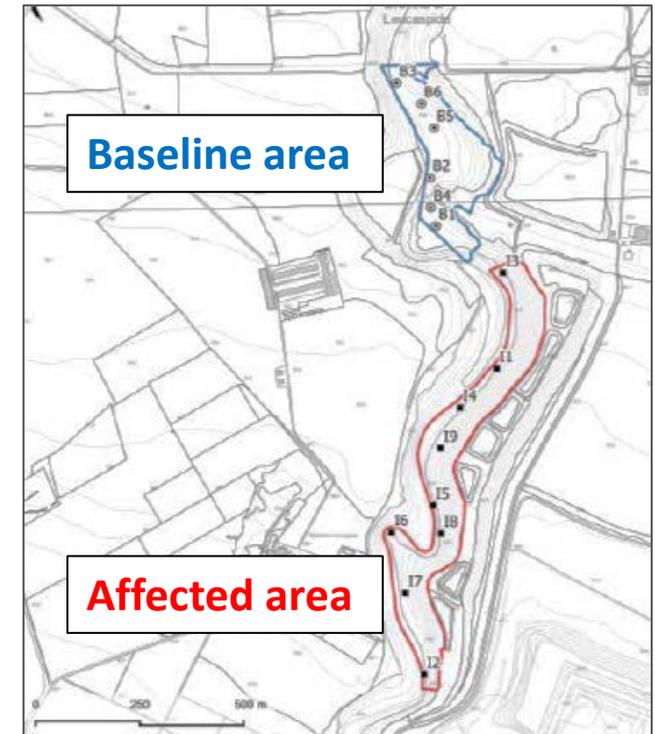
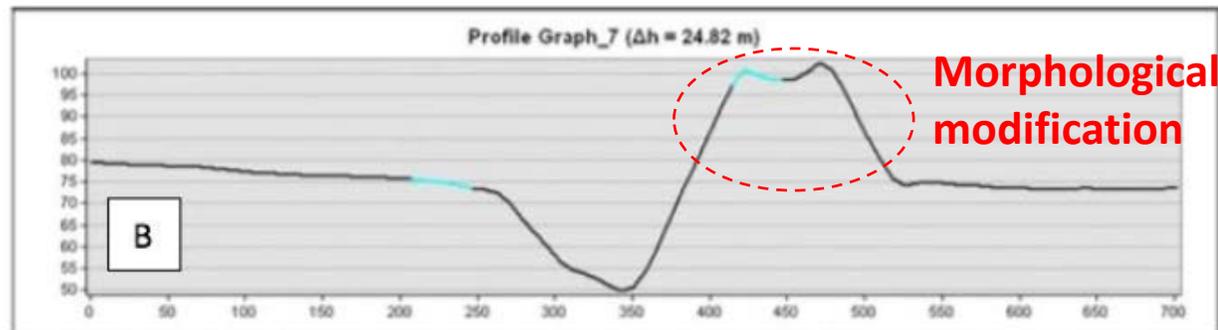
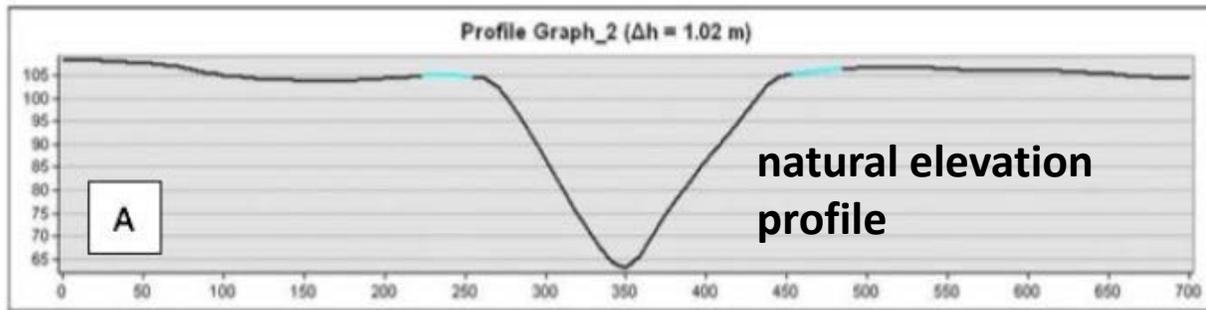
In-situ inspections and data collection

Air-drone inspections (remote sensing)



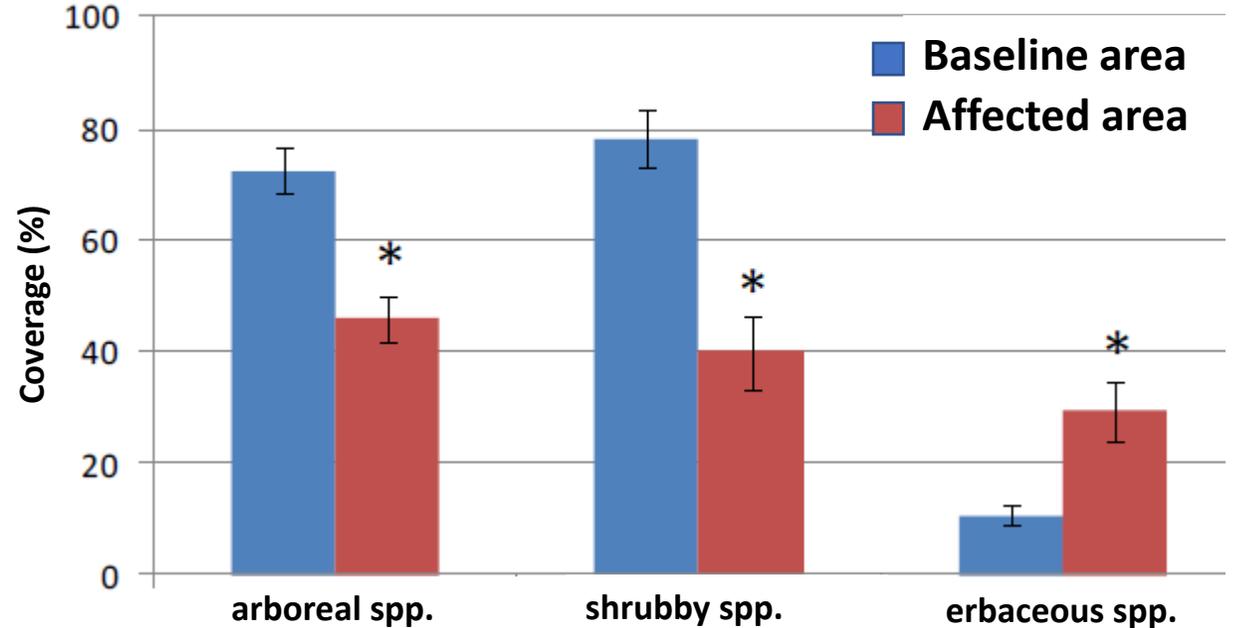
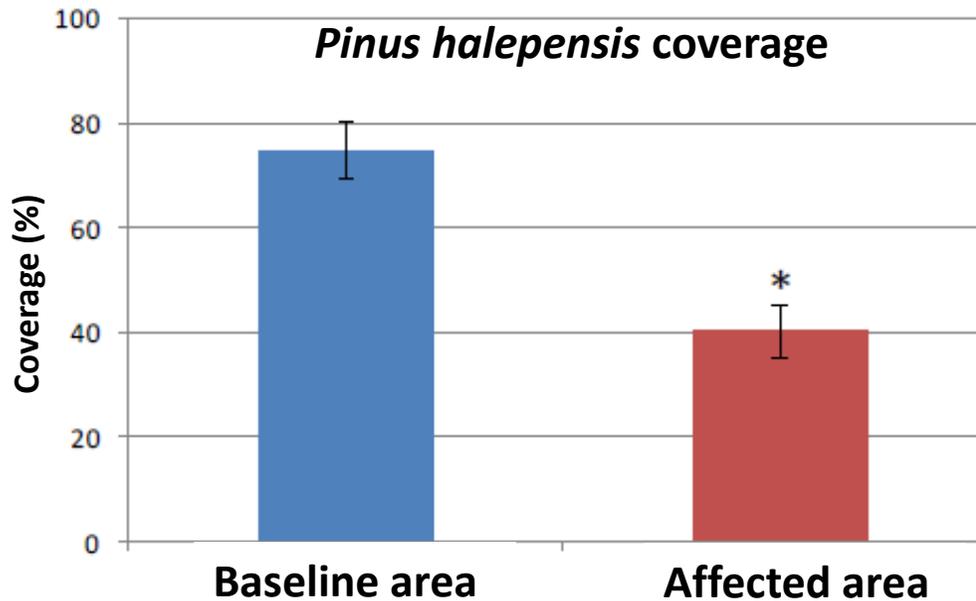
Available territorial information analysis and processing

- Study of the habitat and typical vegetative species existing in the site
- Perimeter of the affected area
- Identification of a «baseline area»
- Data acquisition about morphological aspect (altimetry, exposition) and ground cover
- Planning the on-site investigation



On-site investigation

- Identification of plant species characterizing the habitat
- Data collection on Arboreal, shrubby and erbaceous **structural aspects** and **percentage of coverage**
- Evaluation of statistically significant differences



Air-drone inspection

- Acquisition of high-resolution image
- Identification of homogeneous areas (VARI index)
- Assignment of coverage level (by considering the results of the on-site investigation)

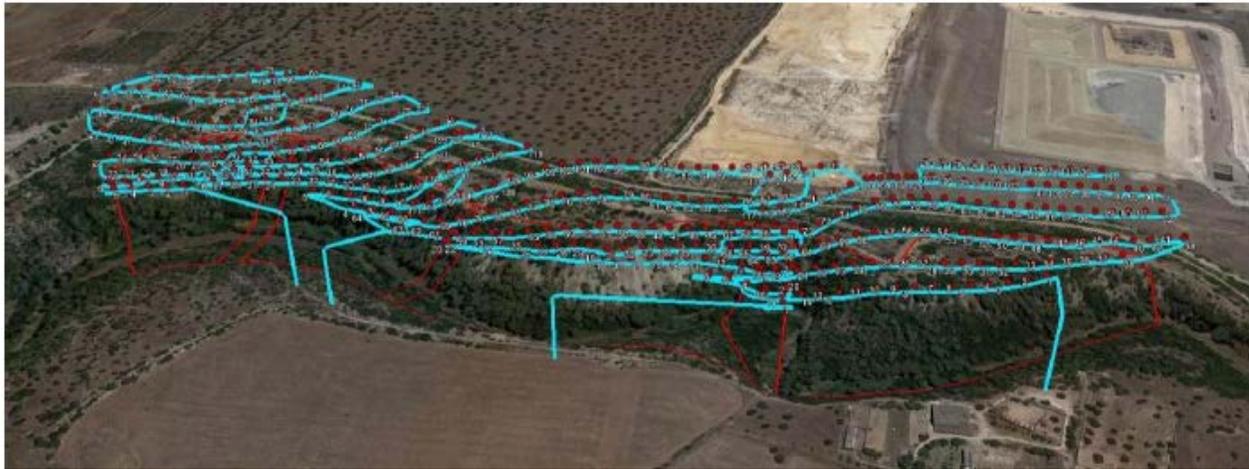
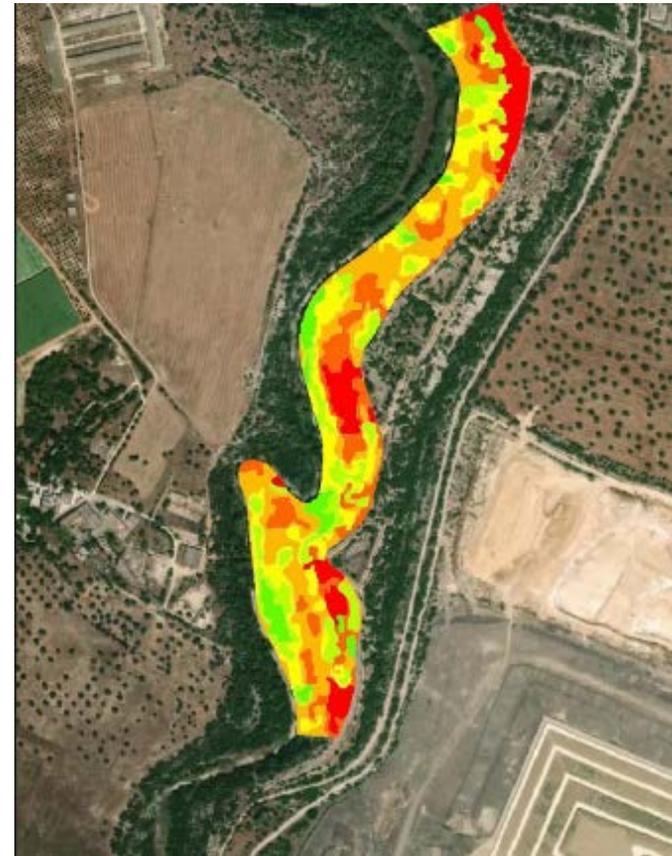


Image acquisition path

VARI index map



No coverage

High coverage

Conclusion of the assessment

Original extension of the Habitat 9540 in the investigate site
6.40 ha

Extension of Habitat 9540 affected
5.45 ha (85%)

Criteria for the assessment of the environmental damage

Covered area

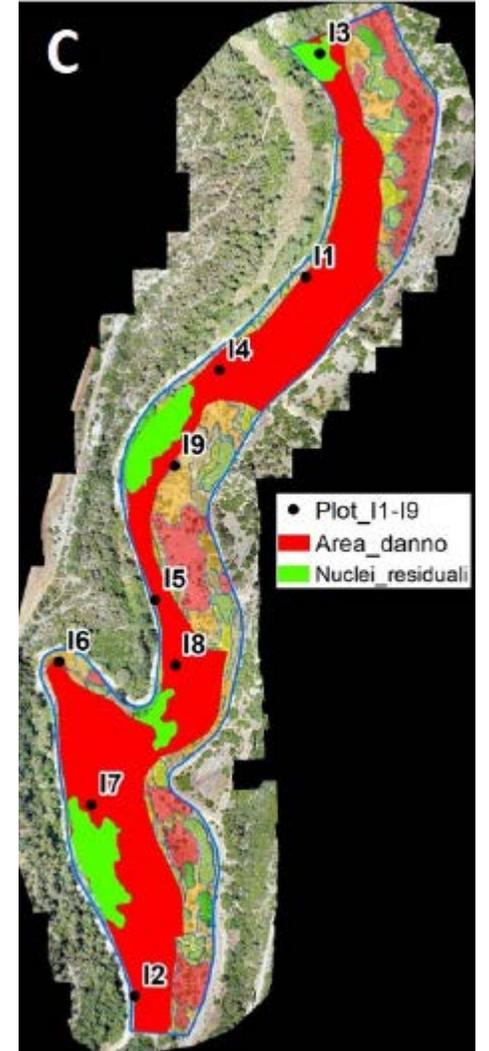
Decrease in coverage
(25-40% in the affected area; 70-80% in baseline condition)

Capacity to recover

Very low (residual habitat affected by process of degeneration)



SIGNIFICANCE OF THE DAMAGE



**thank you for
your attention**



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