



Voluntary participation in environmental management

Example of Adopting a Stream Voluntary involvement in stream restoration and management

Brussel October 2018.

J.L.Fiselier Royal HaskoningDHV





What is adopting a stream?

There are many different forms but the essence is involving local authorities, private firms, organisations and even individuals in the monitoring, management and restoration of streams on a **voluntary** basis, sometimes in combination with a economic incentive.




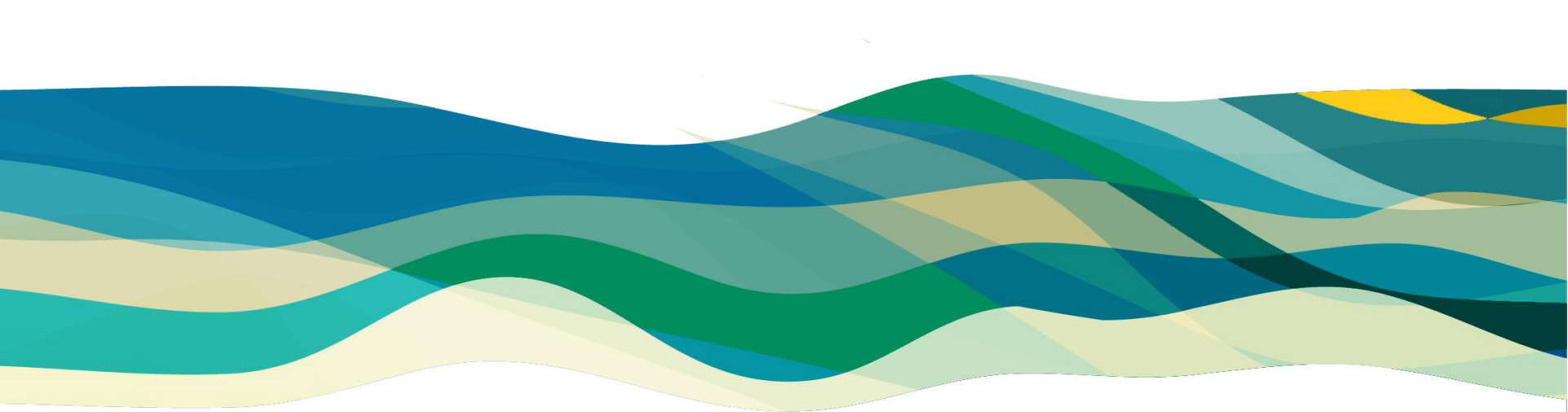


Why adopt a stream?

Practical considerations since some tasks are best performed by local residents.

Management needs in order to reach management goals for which existing instruments are not sufficient.

And **self-interest**, for example when initiated by interest groups that value clean water and beautiful streams .



Why adopt a stream?

Basically the motives for starting an adopting a stream program can be **socio-political**, giving citizens more influence and tasks.

Higher level of integration and coordination
needed for effective management.

.





What forms of adopting a stream exist?

Adopting a stream has basically three dimensions:

Organisational model: Organized on the national or more local level; initiated by authorities or non-governmental groups

Scope of involvement: It can involve monitoring, restoration measures but also joint assessments and planning

Level of integration: it is directed at the stream itself, the riparian zones or even the entire catchment area .





How to get stakeholders interested?

Involvement can be based on:

Community sense and participation

Self-interest as user or **scientific and personal interest** in the streams history and ecological functioning.





What forms of involvement?

Monitoring and citizen science as well as **river clean-up** are the most common voluntary actions, followed by **small scale (micro-habitat) restoration**.



What forms of involvement?

Prevention of diffuse pollution may take the form of **better use of fertilizers and agrochemicals** and appropriate sanitation.

Farmers may engage in **bufferzones** and **best practices** but these are often steered also by economic incentives.





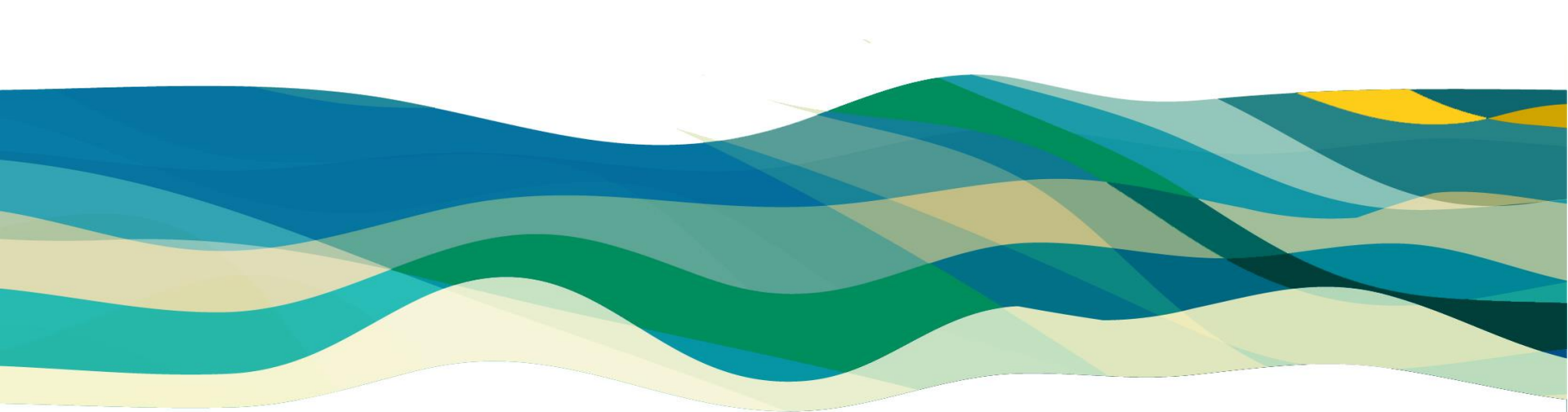
Examples of adopting a stream

Italy

Spain

Germany





Italy

Contratto di fiume

Addottare un torrente

Catchment based sustainable development



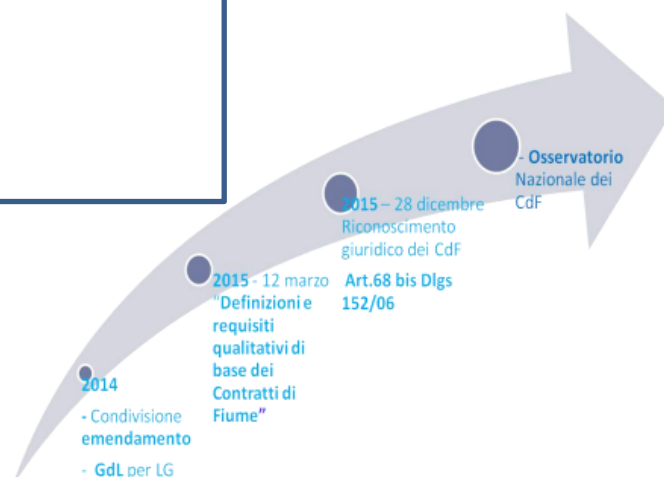
ITALY: Contratto di fiume (CdF), (situation 2017)

Towards participatory catchment management

93 existing contracts, 11 participating organisations
82 in preparation
101 starting, initiating

Guidelines (2015)
by MATTM, ISPRA
and National CdF
coordination table

Legal
establishment
of CdF (Art,68
bis Dlgs) (2015)



**PARTECIPAZIONE
ALLE SCELTE PER LA
GESTIONE DEI BENI
COMUNI: acqua ...
protagonismo delle
comunità**

Contratto di fiume, Italy (situation 2017)

Towards participatory catchment management

This form focusses on stream restoration and sustainable development.

The Water framework directive is a strong incentive

Principles:

- Coordination between authorities
- Local Participation
- Sustainable development



PARTECIPAZIONE
ALLE SCELTE PER LA
GESTIONE DEI BENI
COMUNI: acqua ...
protagonismo delle
comunità

Contratto di fiume, Italy (2017)

Contract and types of actions

Contractual basis:

1. Action plan,
2. Communication and Participation plan
3. Monitoring program for evaluation
4. Formal contract Contratto d Fiume

All existing examples are from the northern region, in Italy so mainly for perennial rivers.

Economically sound and realistic finance in line with other economic instruments at the EU and national levels and with regional development plans.

Contratto di fiume, Italy (2017)

Contract and types of actions

Actions undertaken:

Environmental enhancement

Reduction of flood risks

Protection of water quality

Sustainable urban drainage

Better monitoring and control

Protection of landscape and protected areas.

In bold major objectives to which stakeholders contribute

Water front development

Sustainable electricity production.

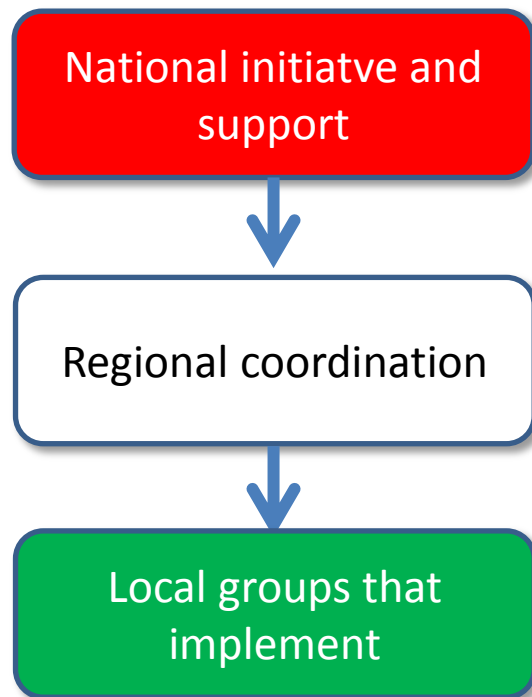
Sustainable tourism

Sustainable agriculture and horticulture.

So there is a strong link with sustainable development. This is due to the fact that the CdF is catchment based.

Contratto di fiume

National website and support



Agreements between authorities and local groups regarding management, land use, flood protection, use of the river.

Regional example: CdF Feltrino

Organisation of 10 municipalities



- 1.Phase: participative assessment and planning
- 2.Scenarios, measures, ideas
- 3.Proposed content contratto di Fiume

Example: Media valle de Tevere

A most active and integral approach



CONTRATTO DI FIUME MEDIA VALLE DEL TEVERE DA ORTE ALLA RISERVA NATURALE TEVERE-FARFA

Terza Assemblea Partecipativa

Presentazione analisi conoscitiva preliminare e prospettive

sabato 18 marzo ore 10:00 - Orte - Agriturismo Calderari - loc. Lucignano, 9

PROGRAMMA

ORE 10:00 - Saluti
Angelo Giuliani - Sindaco di Orte
on. Daniele Sabatini - consigliere Regione Lazio
on. Enrico Panunzi - consigliere Regione Lazio
modera: Daniele Proietti - Assessore Urbanistica di Orte

Intervento introduttivo
Massimiliano Filabozzi - Coordinatore tecnico del Cdf

a seguire:

- Dall'analisi conoscitiva preliminare al documento strategico
Massimo
- Qualità
Angelo
- Assetto
Giorgio
- Stato
Pierluigi
- Il percorso
Giordano
- Presenti
Francesco
- La Media
regionali
Eugenio

ORE 13:30 - Brunch
nel pomeriggio:
- Visita guidata a Orte sotterranea

Sono invitati a partecipare i cittadini, gli agricoltori, gli operatori del turismo, le associazioni

Per informazioni: 0744910336 - 3939518989
spertell@contrattodifiumemediavalledetevere.net

Meetings with the public:
Joint fact finding
Problem assessment
Defining measures

CARTE DI SINTESI DEI LABORATORI PARTECIPATI

- ANALISI CONDIVISA DEL TERRITORIO - CARTA DI SINTESI
- ANALISI CONDIVISA DEL TERRITORIO - TEMA ACQUE
- ANALISI CONDIVISA DEL TERRITORIO - TEMA PATRIMONIO
- ANALISI CONDIVISA DEL TERRITORIO - TEMA USO DEL SUOLO
- TEMATISMI TRATTI DAL PTPR REGIONE LAZIO (Regione Lazio - Novembre 2007)
- TEMATISMI TRATTI AL PIANO DI ASSETTO IDROGEOLOGICO (ADB Tevere - Approvato con D.P.C.M. del 10 Novembre 2006 e ss.mm.ii.)
-

REPORT

- REPORT TAVOLO ACQUE
- REPORT TAVOLO PATRIMONIO
- REPORT TAVOLO USO DEL SUOLO
- REPORT SOPRALLUOGO PONTILI
- RELAZIONE INTRODUTTIVA TERZA ASSEMBLEA CDF, ORTE, 18 MARZO 2017, M. FILABOZZI
- REPORT TERZA ASSEMBLEA CDF, ORTE, 18 MARZO 2017

Technical tables on:
*Land use and soil
conservation
Water management
Cultural heritage*

Example: Adotta un Torrente (Tuscany)

Small scale contracts, often community level

Consorzio di Bonifica Toscana Nord e i
Sindaci di Massa e Carrara

"Adotta un Torrente": i cittadini coir

Share Tweet G+ RSS

17/03/2017 07:30

Il Consorzio di Bonifica Toscana Nord e i Sindaci di Massa e Carrara promuovono un progetto finalizzato alla tutela dell'ambiente e alla prevenzione del rischio idrogeologico

"Adotta un torrente" è un progetto che il **Consorzio di Bonifica Toscana Nord** ed i **Comuni di Massa e Carrara** propongono a tutte le **associazioni di volontariato e protezione civile** che operano nei **Comuni della fascia costiera della Provincia di Massa e Carrara**: un sistema finalizzato alla tutela dell'ambiente ed alla prevenzione del rischio idrogeologico.

Per le associazioni che vorranno aderire è prevista la stipula di una **convenzione** il cui contenuto varia a seconda della vocazione e della capacità operativa dei volontari, dalla tipologia del territorio e del reticolo idrografico.

La convenzione pr
si arricchisce di ulte
rifiuti in alveo e su

È prevista anche un
e l'organizzazione o

Alle associazioni ad
impegni ed alle attiv

Il progetto è scatu
quali il Consorzio di



Fiume Frigido

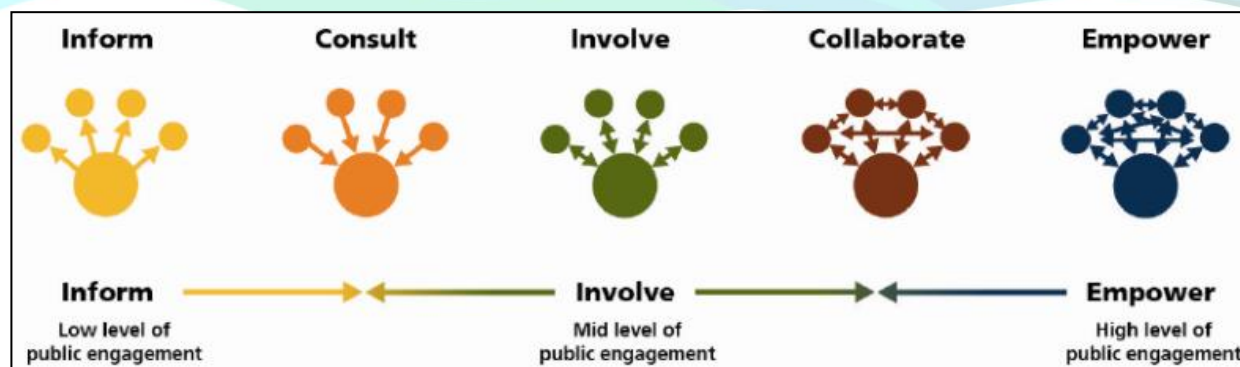


Monitoring
Protection of biodiversity
Clean up of the river bed
Guided tours, public
gatherings
Financing of basic costs

This form focusses on public
involvement on the stream
itself.

Setting objectives

Level of public involvement in stream restoration



Setting water quality objectives



Setting restoration objectives



Defining water quality measures



Planning of activities



Execution of activities



SPAIN: Custodia fluvial

National initiative, directed at riparian land owners/farms

Plataforma Custodia del Territorio

GOBIERNO DE ESPAÑA
MINISTERIO DE AGRICULTURA Y PESCA, ALIMENTACIÓN Y MEDIO AMBIENTE
Fundación Biodiversidad

Inicio La custodia Novedades

Custodia del Territorio (CdT)

Custodia Fluvial

Custodia Agraria

Streams

Wetlands

Riparian land

La custodia fluvial: principios básicos

Fecha de creación: Lunes, 6 Mayo, 2013

Como ocurre con la custodia en el ámbito marino, la custodia fluvial ha comenzado a desarrollarse en estos últimos años con el propósito de impulsar acuerdos con propietarios para restaurar y mejorar los ríos y las zonas húmedas.

Las entidades de custodia que trabajan para la conservación de los ecosistemas fluviales y las zonas húmedas, mediante metodologías y prácticas que tienen en cuenta las peculiaridades de cada territorio, ofrecen una gran variedad de servicios que mejoran la calidad del agua que fluye por ellos. Este tipo de custodia no tiene propietario, sino que es de dominio público. Esto significa que es la Administración la responsable de gestionar

+ información

- No hay contenidos relacionados

Últimas noticias

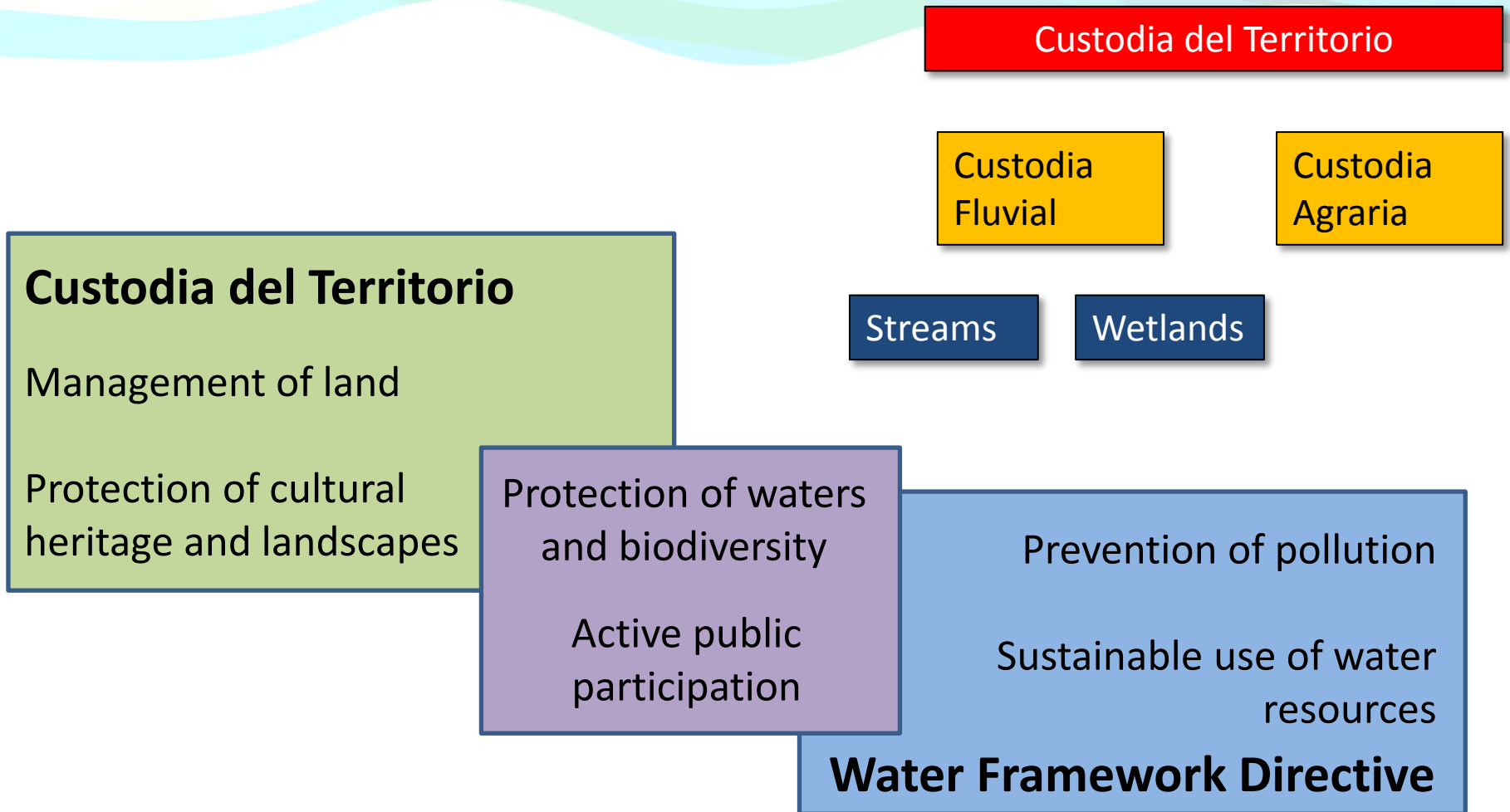
El río Camero liberado de un azud en la custodia fluvial

El papel de los notarios en la custodia del territorio

Jue, 24/08/2017

Custodia fluvial

The implementation of the EU-WFD is part of CdT



Custodia fluvial

The implementation of the EU-WFD is part of CdT

Three types of contracts:

1. Conservation measures by the farmer
2. Allocation of the management of the farm to a managing organisation
3. Selling the farm to a managing organisation

Organisation CdF (develop contracts and management plans)

Land owners of riparian lands

Competent authorities in water management, agriculture

Custodia fluvial

Example: Galicia CF Ulla Imia Lerez



Assesment of needs
Clean up
Removal of invasive species
Restoration of riparian vegetatio
Restoration of llevadas and footpath

Initiated by a regional NGO (ADEGA).

Finance by EU Leader,
ministry and AGADER
Cooperation with local
municipalities.
Cooperation with local
farmers

Custodia fluvial

National initiative, directed at riparian land owners

CERM

INVESTIGACIÓN EN RÍOS

EDUCACIÓN Y
SENSIBILIZACIÓN
CUSTODIA

CERM >> Custodia fluvial

CONSERVACIÓN Y RESTAURACIÓN DE SI

TORRENT I PANTÀ DE GARET

Des de l'any 2007 hi ha signat un acord de custòdia entre el Centre d'Estudis dels Rius Mediterranis i el propietari i gestor de la finca (Pere Garet), per tal de conservar i millorar l'estat ecològic i la biodiversitat del torrent i pantà de Garet, compaginant-hi activitats agràries,

El projecte de custòdia

El gestor de la finca (Pere Garet) i el Centre d'Estudis dels Rius Mediterranis - Museu Industrial del Ter tenen un acord de custòdia*, establert inicialment en 10 anys, amb l'objectiu de conservar i millorar l'estat ecològic i la biodiversitat del torrent, el pantà i el seu entorn, compaginant-hi activitats agràries, forestals i turístiques sostenibles.

Restauració de la vegetació de ribera a tot el torrent i les vores del pantà



Col·locació de tanques per evitar l'entrada del bestiar a la zona de ribera



Campanya "Plantem el Futur" (març de 2008)



Seguiment d'estat ecològic i avaluació del projecte

CENTRE D'ESTUDIS DELS RUS MEDITERRANIS

Actuacions

Reperfilat de les riberes i ampliació de la secció del torrent aigua amunt i avall del pantà



Col·locació d'abeuradors per a bestiar fora de les ribes del torrent i l'estany



Informació pública



Estudis del poblament de peixos i crancs



Seguiment de l'estat ecològic i avaluació socioambiental del projecte



On a private farm.
Contract between
farmer and CERM

Activities: as part of the contract

Study of fish populations.
Zoning of cattle grazing.
Restoration of the river bed.
Public information
Restoration of riparian vegetation
Project evaluation

Adopción de ríos

Initiative by a national sportfishing federation



AEMS
Ríos con vida

INICIO ACTIVIDADES FORMACIÓN PUBLICACIONES BLOG ¿QUIÉNES SOMOS?

Home > Actividades > Adopta un Río

15 Sep 2015

AUR - Adopta un río

Written by Ríos con Vida. Posted in AUR

El Programa **Adopta Un Río (AUR)**, de AEMS - Ríos Con Vida, es un programa de la década de 1990 con el objetivo de sensibilizar, formar e implicar a la ciudadanía en el cuidado y mejora de su río cercano, desde el conocimiento del funcionamiento del ecosistema y de las relaciones que mantienen con su entorno.

Restauración del hábitat fluvial

REVEGETACIÓN DE TRAMO DE RÍO TRUCHERO

MARZO 2005 ABRIL 2005 MARZO 2006

Río Curueño

99 actuaciones (1988-2013):

- ✓ Dispositivo Dust: 8
- ✓ Empalizada sauce: 7
- ✓ Estaquillado: 12
- ✓ Rastrillado frezaderos: 72

Adopta Un Río

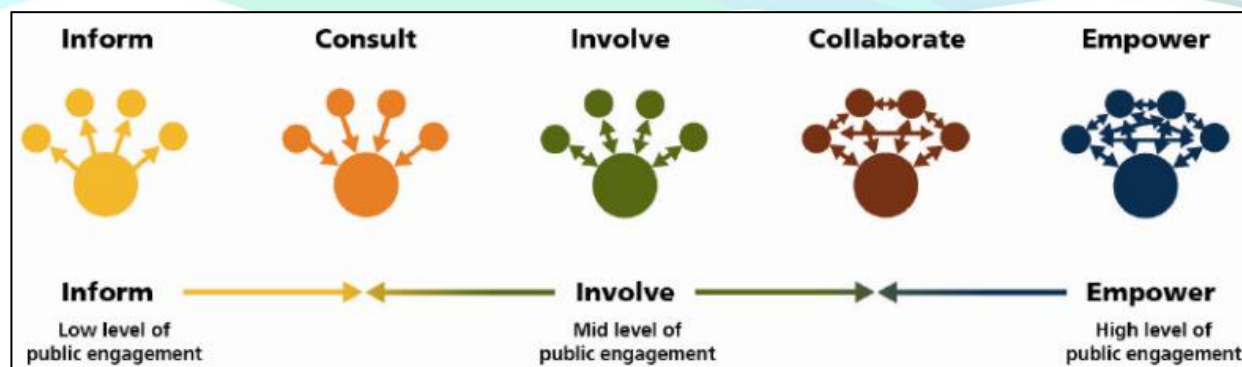
rio Curueño y otros. Empalizada Salix en el río. Dispositivo "dust" en río Duerna. requilado. En Schmidt, G. & Otaola, M. (2002). Aplicación de técnicas de bioingeniería en ríos y riberas. DEDEX. Madrid

han puesto en práctica programas AUR en los ríos (1994); Madarquillos (Madrid. 1993-94), Pusa (Toledo.

Involvement of local citizens. So far several rivers, but only for a duration of several years.

Setting objectives

Level of public involvement in stream restoration



Setting water quality objectives



Setting restoration objectives



Defining water quality measures

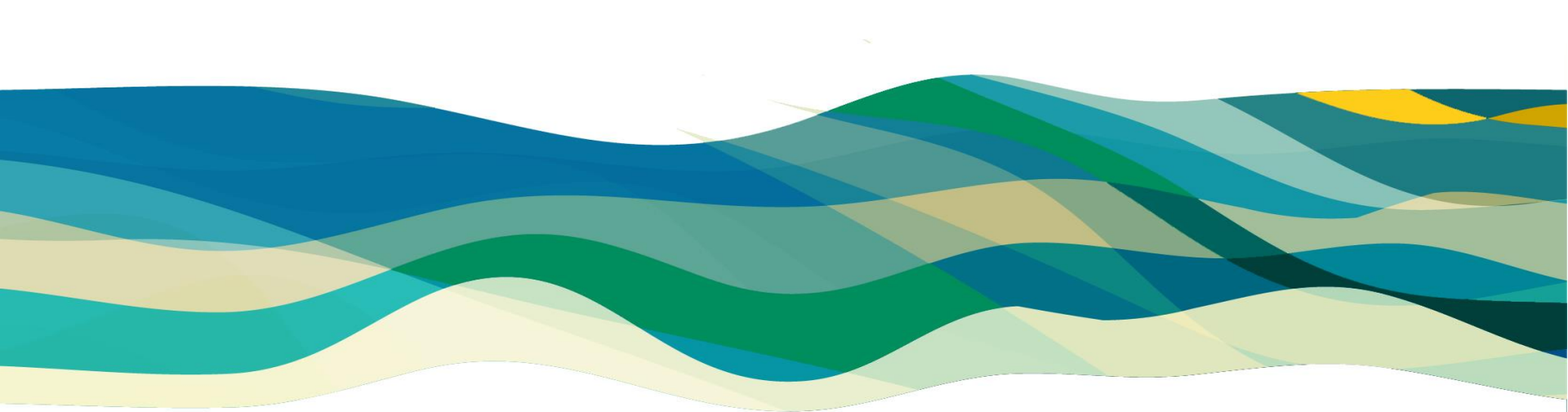


Planning of activities



Execution of activities





Germany

Bachpatenschaften



Example: Rheinland Pfalz

Already 30 years ongoing

Focus is on the stream itself



Finance:

Centrally financed and supported
Ministry

717 Bachpatenschaften on
2760 km

Organisation

Voluntary

All kinds of groups can form and ask for (financial) support

Formal agreement with official responsible body

The group can have their own objectives

Training is organised also by volunteers

Monitoring and stream
restoration

Roles of voluntary groups:

Clean up

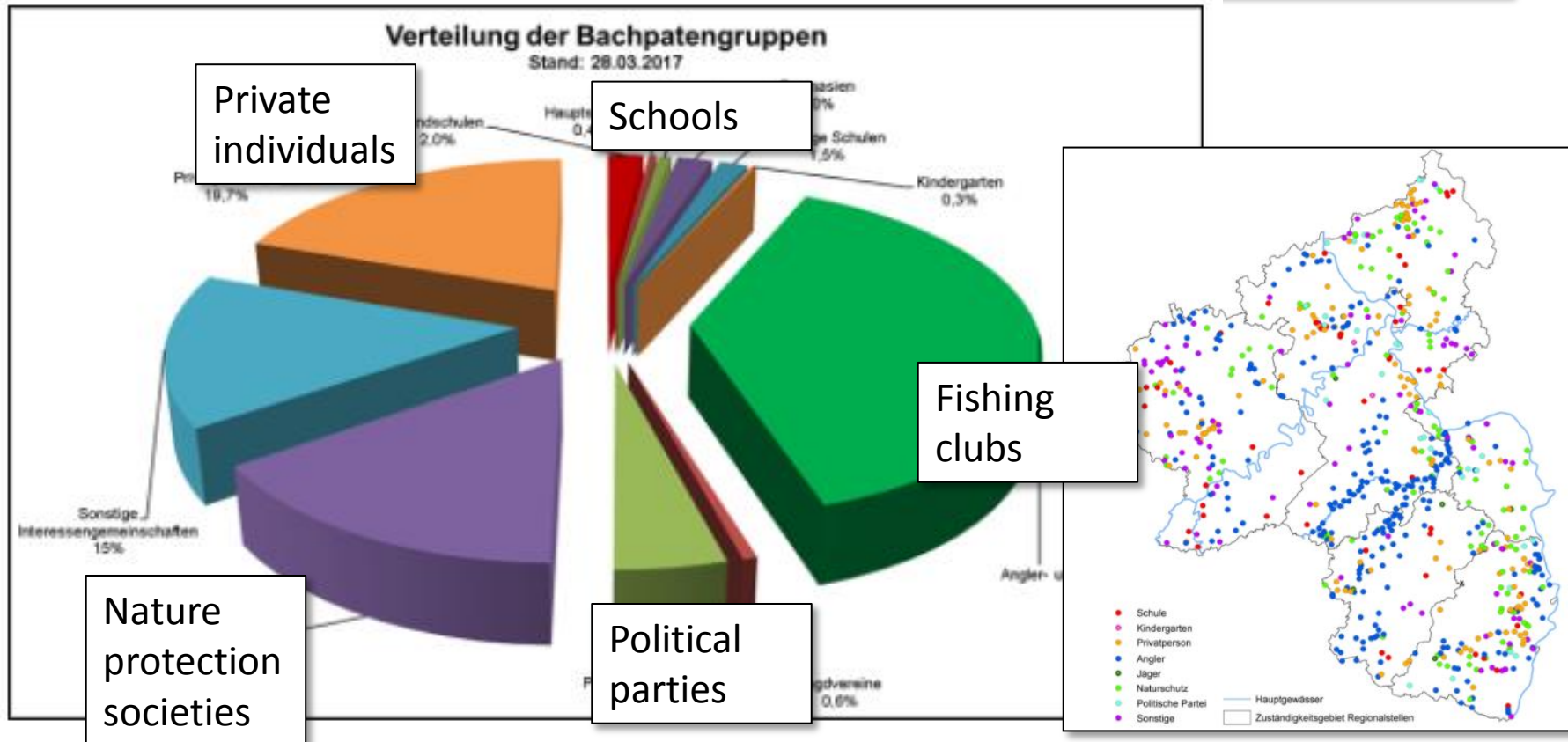
Monitoring (bio and chemical)

Training and management

Example: Rheinland Pfalz

Already 30 years ongoing

Initiative: “Action Plus Blue” Catchment Management in Rheinland Pfalz



Example: Rheinland Pfalz

Already 30 years ongoing

Aktion

Plus



Gewässerentwicklung
in Rheinland-Pfalz

HOME - Aktion Blau Plus

Umweltbildung Wasser

Veranstaltungen

Akteure

Projekte

Aktuelle Projekte

Wooge und Triftbäche im
Pfälzer Wald

Statusanalyse

Gewässerrandstreifen

IRMA I

IRMA II

Ökonomische
Gewässerbewertung

Durchgängigkeit

Renaturierungen

Informationspaket
Hochwasservorsorge

Professional Coordination,
website, support



HOME - Aktion Blau Plus > Projekte > Aktuelle Projekte > Die Offenlegung des Schantelbaches

Die Offenlegung des Schantelbaches „Nichts ist unmöglich“ für die Leiwener Bäche

Stück für Stück - renaturiert die Verbandsgemeinde Schwanau den Bach Leiwener Bach. Der Bach war zu schmal für das Hochwasser und wurde auf seine ursprüngliche Breite offengelegt, neu gestaltet und erlebbar gemacht werden.

Über 70 Bachanlieger und Grundstückseigentümer waren unentgeltlich die notwendigen Flächen zur Sanierung bereitgestellt. Jeder Grundstückseigentümer hat eine individuelle Lösung entwickelt.

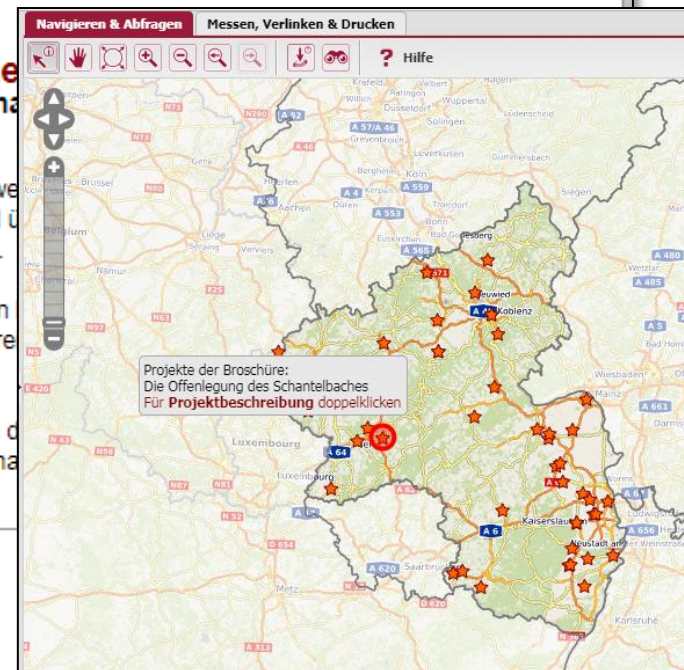
Auf einer Länge von insgesamt 2 km konnte der Bach in die ursprüngliche Breite verbreitert und naturnah modelliert werden. Auch der Schantelbach wurde auf seine ursprüngliche Breite zurückgeführt. Das „gewisse Etwas“.

Projektpartner

Bachanlieger, Kulturverwaltung, Planungsbüro

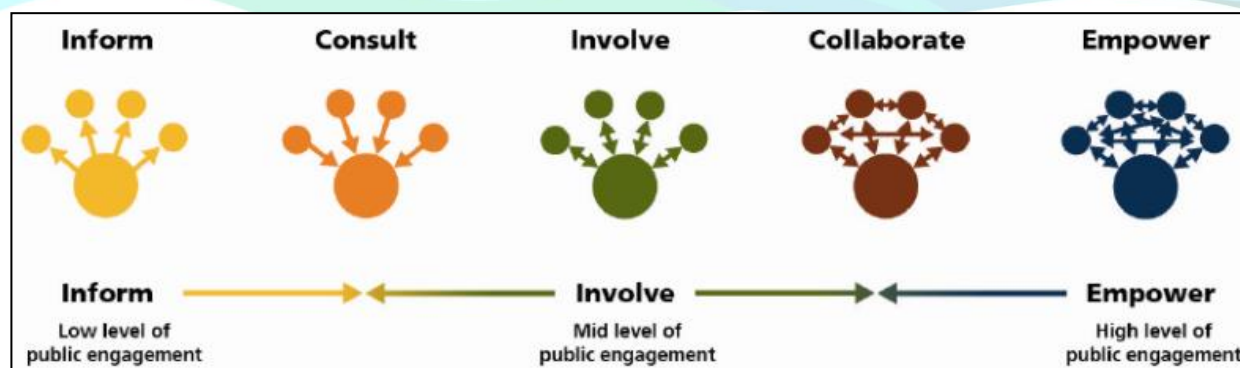
Schwerpunktt Themen

Engagement der Bürger, Kooperation aller Beteiligten, Hochwasserschutz für Leiwener Bäche, Bereicherung des Ortsbilds



Setting objectives

Level of public involvement in stream restoration



Setting water quality objectives



Setting restoration objectives



Defining water quality measures



Planning of activities



Execution of activities



How to involve volunteers

Different stakeholders are differently motivated

Laws of attraction:

Attractive landscape, clean waters for users and riparian citizens

Cultural identity, often related to childhood memories, historic events

Joint activities, community participation

Rewarding challenge and felt responsibility

Scientific and personal interest

Different groups:

Farmers: usually a difficult group, but diverse, sometimes organized or not

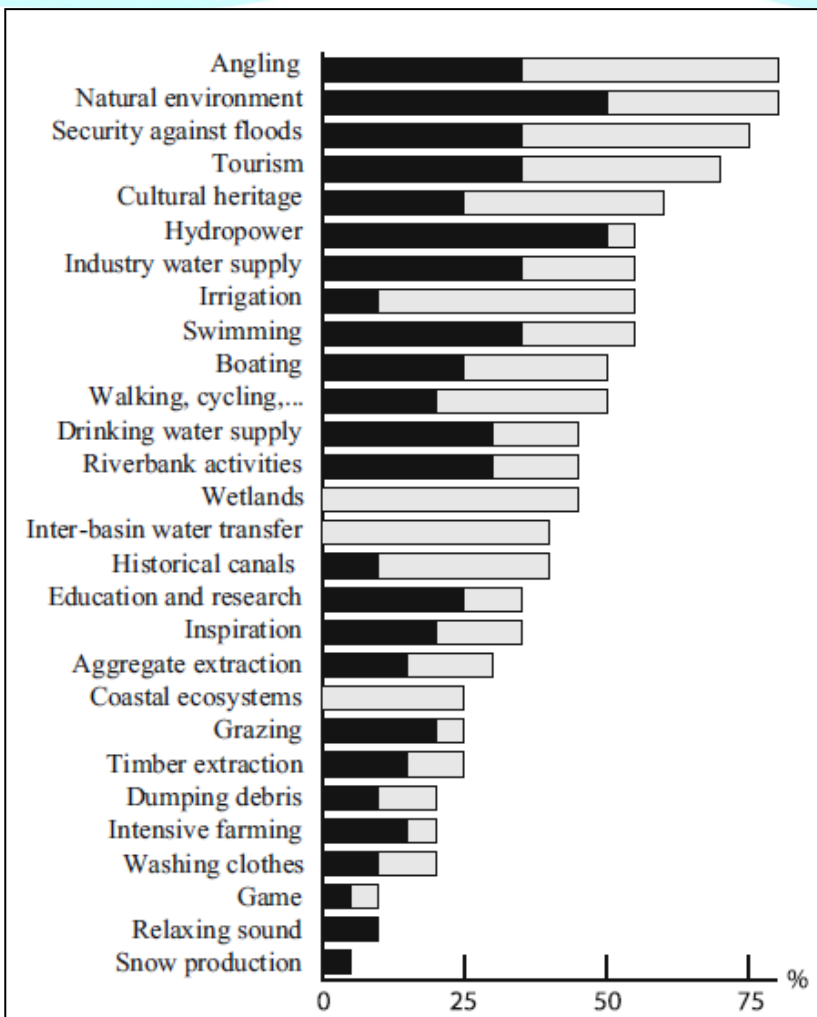
Fishermen: usually the most motivated group.

Riparian users: usually strongly motivated by their own interests

Young people, need to be addressed in different ways, less on responsibility but more on group activity.

How to involve volunteers

Motivation is strongly governed by the use of the stream



Example of issues mentioned by riparian participants



How to keep volunteers involved

Requires constant attention

Balance in give and take; give the opportunity of data sharing and access

Appreciation and recognition; publicise names, give awards

Community development; actively create volunteer groups with their own identity.

Carreer and personal development: develop from apprentice into trainer

It does matter: use and show how data is used in decision making

Listen and act: facilitate local initiatives and ideas for restoration

Peter Fox, Excellence in Data Collection

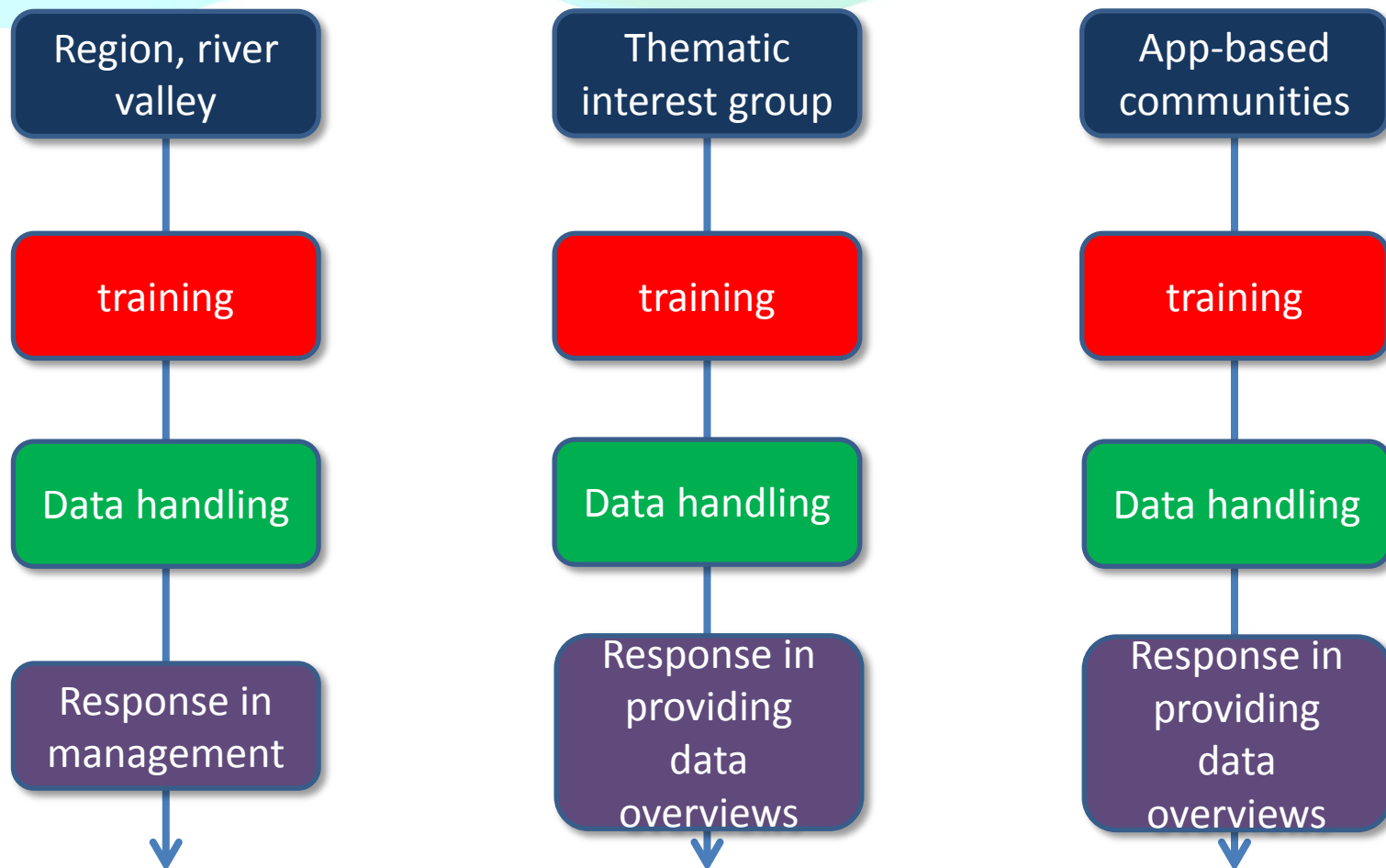
Macon ~ Chemical & Bacterial Monitor ~ Active Since 2009 ~ 28 Monitoring Events

Peter adopted 2 sites on the Lower Ocmulgee River Watershed 4 years ago, which was significant because volunteer water quality data had been lacking in this area for years. Peter has collected data once a month for four years without missing one sampling event. He drives 100 miles to conduct his monitoring, compiles annotated time lapse photos of his sites and is always looking to recruit more volunteers.



Basic models for volunteers in monitoring

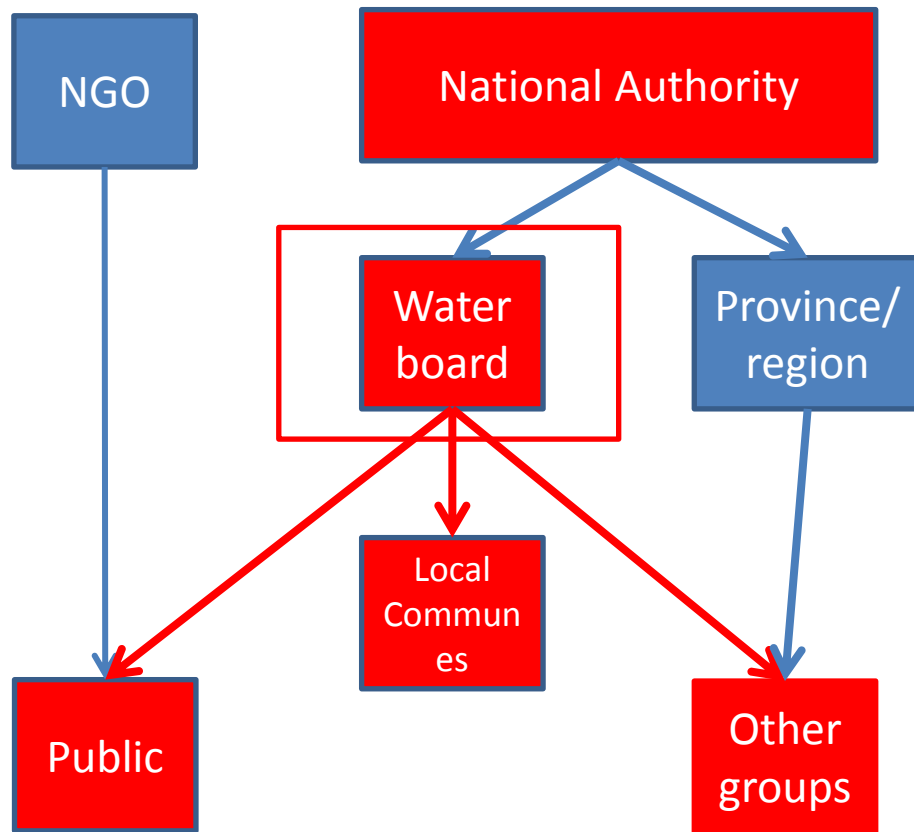
Personal interest and handy apps



Organisational models

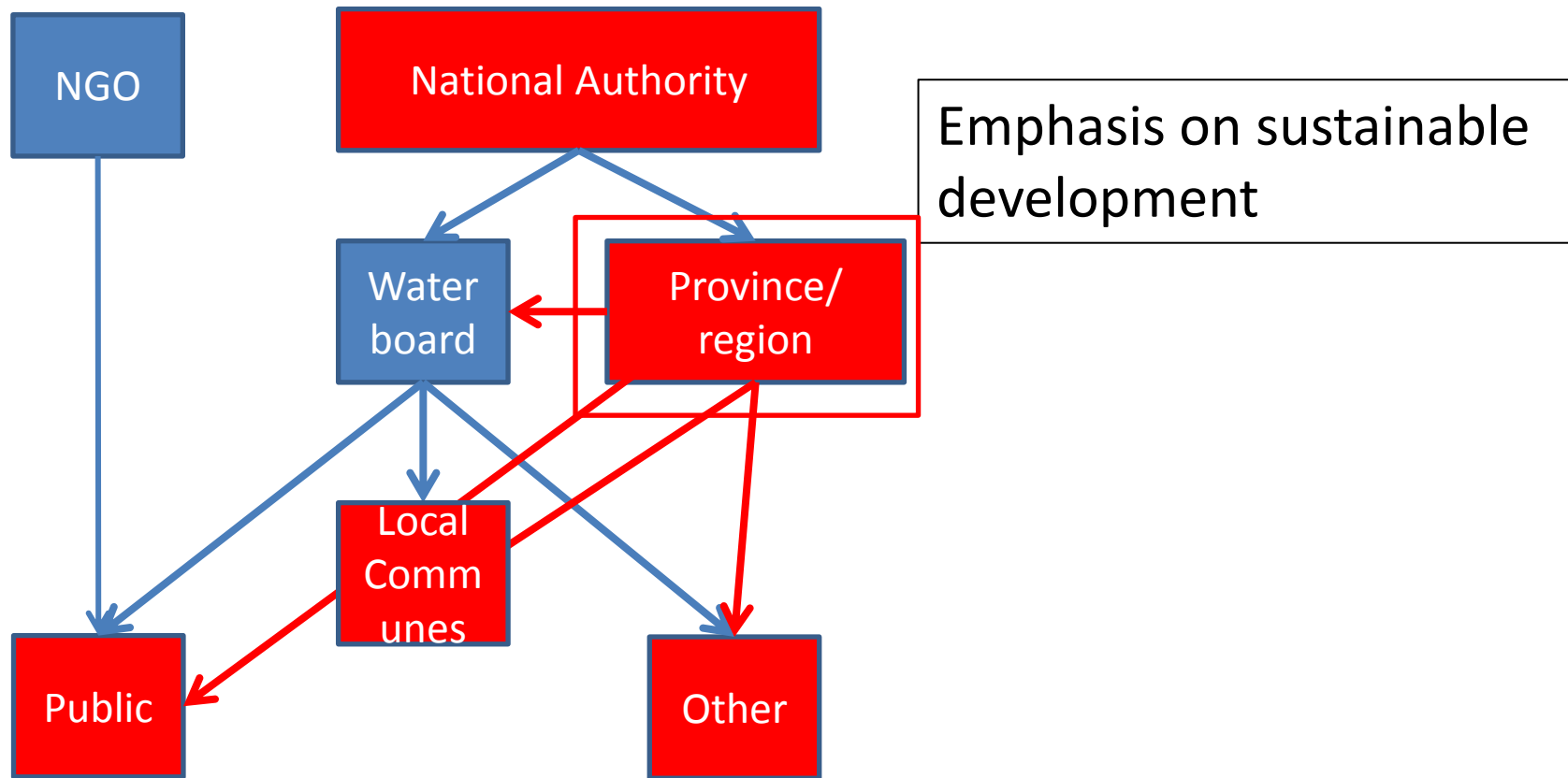
Depend on objectives and level of integration

Who takes the initiative

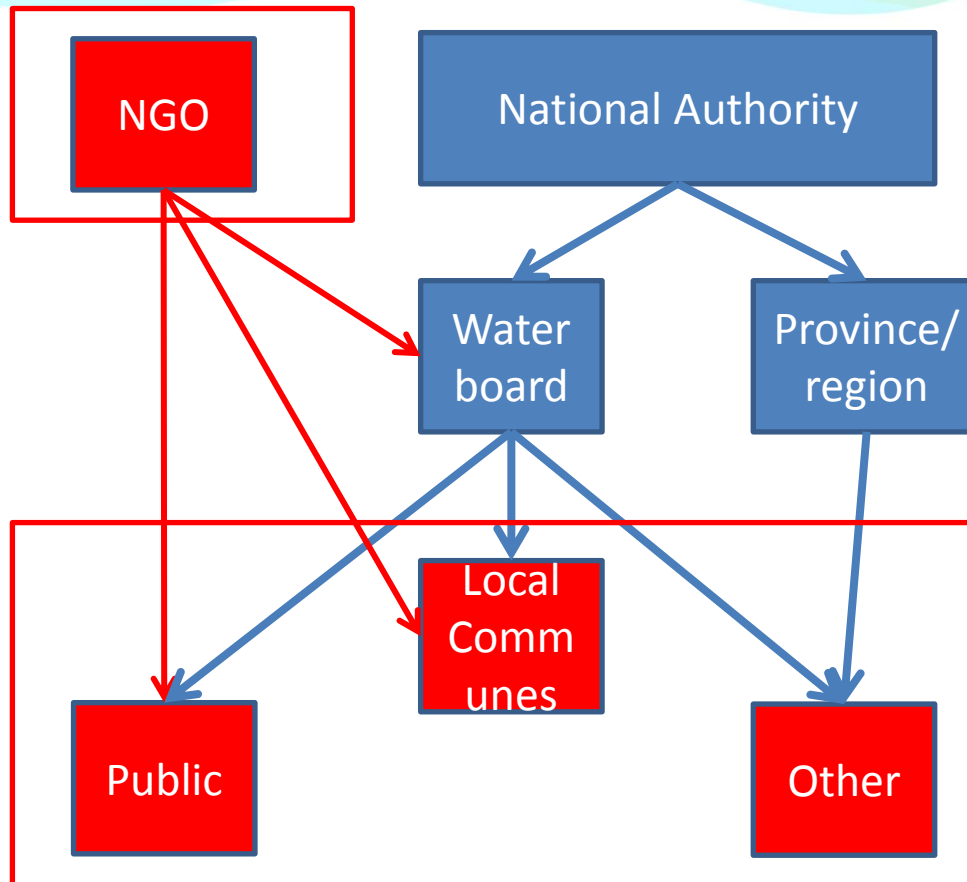


Emphasis on stream restoration

Who takes the initiative?



Who takes the initiative?



Emphasis on specific restoration objectives

Concluding remarks

There is great potential for voluntary involvement in stream restoration.

Dedicated programmes are needed to initiate, coordinate and involve stakeholders.

There are limits, so careful consideration is needed in matching management objectives with voluntary involvement, or formal requirements, economic incentives.

Involvement can reduce costs, enable tailor-made management, but is especially raises awareness, and participatory planning and bottom-up decision making.