AcegasApsAmga
Società del Gruppo Hera

WHY THE PROJECT DRINKADRIA

TWAS Science Diplomacy Workshop on Sustainable Water Management

Enrico Altran – Drinkadria Project Manager

Trieste, 1st December 2015

Let's grow up together

DRINK ADRIA

Adriatic IPA
Cross Border Cooperation 2007-2013

The project is co-funded by the European Union,
Instrument for Pre-Accession Assistance

Provide a new framework on transboundary drinkable water delivery for European decision maker

Drinkadria is composed by six work packages

WP1 – MANAGEMENT AND COORDINATION

provide proper and timely implementation of the project in accordance with the project proposal and the IPA Adriatic rules following the achievement of the set objectives.

LP to FBs

Managing Authority

WP2 – COMMUNICATION AND DISSEMINATION

Drinkadria is composed by six work packages

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Drinkadria is composed by six work packages

WP5 – CROSS BORDER WATER SUPPLY MANAGEMENT

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Drinkadria is composed by six work packages

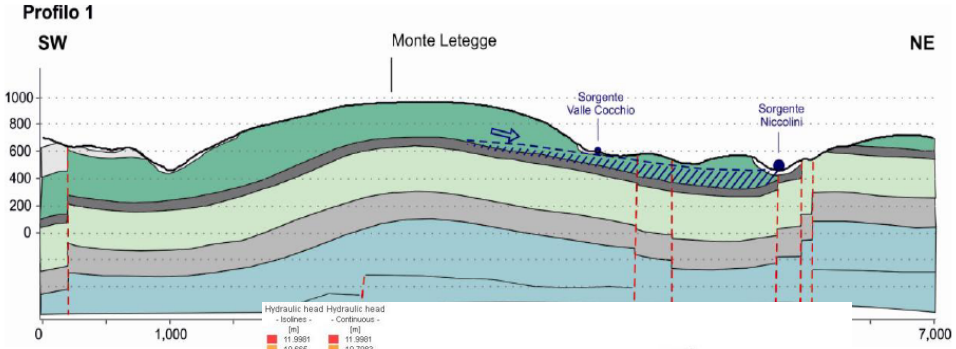
WP6 – PILOT CASES

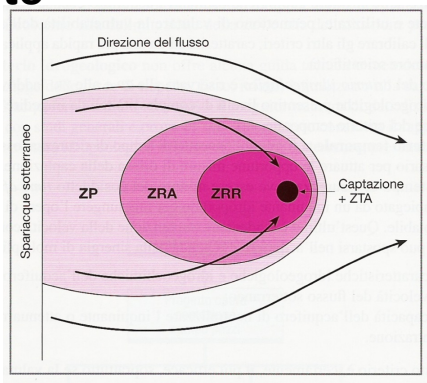
Final Results

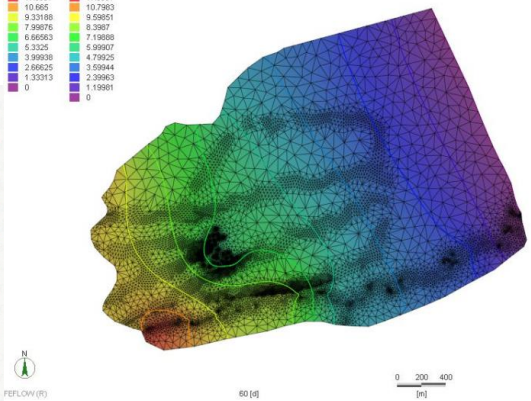
WP4 (IRSA, University of Rijeka)

- ✓ **Prediction of the climate change impact on water resources availability in test areas through numerical models** for scenarios of decreased or increased water demand in the period from 2021 to 2050
- ✓ **Delimitation of springs and well-head protection areas**
- ✓ **Common emergency plans** in case of contamination
- ✓ **Monitoring and reduction of sea-water intrusion by Managed Aquifer Recharge Technique (MAR)**
- ✓ **Quality water resource monitoring in studied area**
- ✓ **Development of hydrological models related to aquifers recharge areas**
- ✓ **Stream discharge monitoring**

Results available on *www.drikadria.eu*



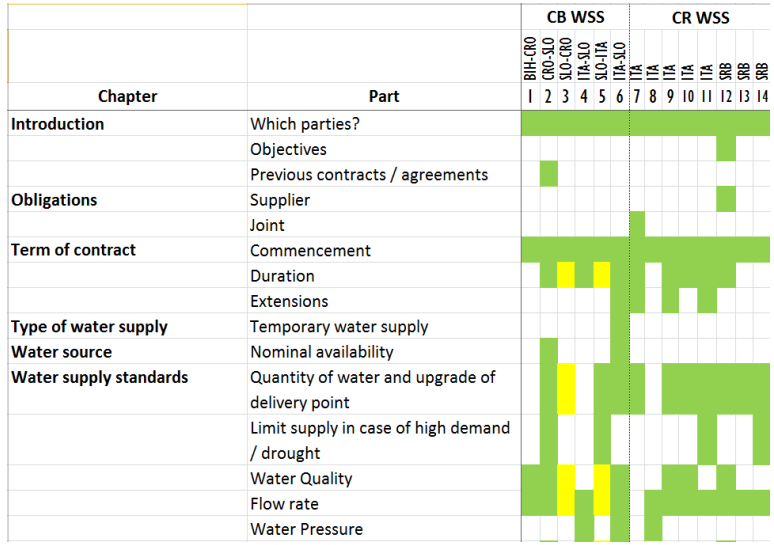




WP5 (University of Ljubljana)

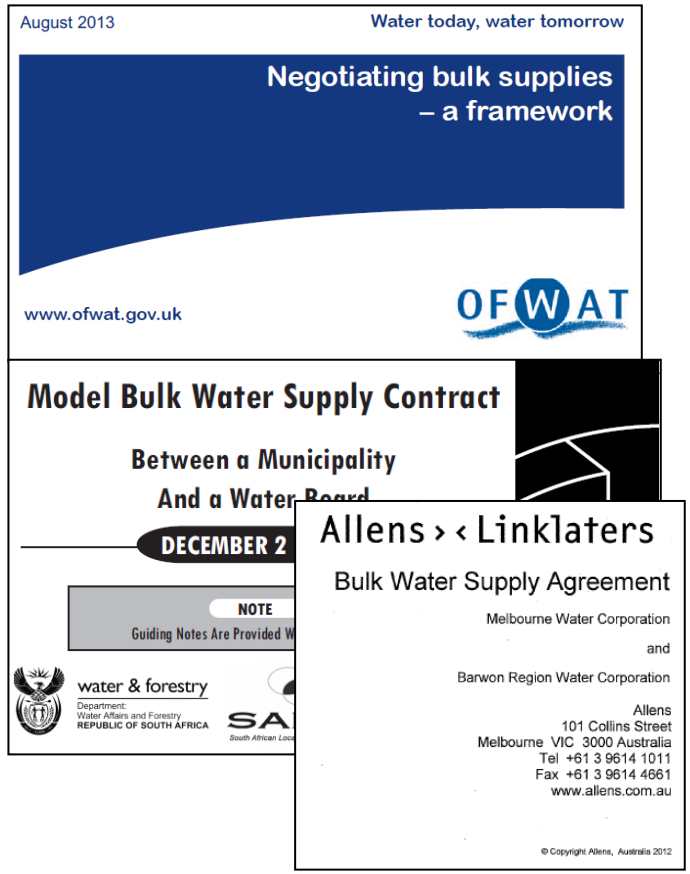
Done:

- **Legislation and technical standards in countries of DRINKADRIA project** were gathered and are accessible on platform http://drinkadria.fgg.uni-lj.si/water-supply/operational-standards/
- **Analysis and comparison of received cross border / region water supply contracts** in area of DRINKADRIA project



In progress:

- **Development of draft contract** via examination of good negotiation frameworks and contracts examples
- **Analysis of the prices** of public and cross-border drinking water supply in selected cases (pricing comparison)
- **Cost analysis** of the drinking water supply service in the cases of CB water supply systems
- **Development of bulk water supply price calculation approach**



WP 6 – PILOT ACTIONS

INSTITUTION	FB	CITY	COUNTRY	Parameters		PERFORMANCE INDEX	RESULTS
CATO	LB	Trieste	Italy	Flow, Pressure, pH, Chlorine, turbidity		infrastucture leakage index (ILI)	
VERITAS	1	Venezia	Italy	Quality: microbiological determination	Fecal contamination indicators, pathogenic microorganisms	selectivity, sensitiveness, quantification and detection time	applicability of q-PCR in fast management of organisms in drinking water
				Quality: Mercury decontamination	Mercury and Iron concentration in groundwater wells	mercury and iron abatement percentage	efficiency and of two different techniques to improve the quality of drinking grounwater
				Water losses	Flow, Pressure, pH, Chlorine, turbidity	% of water losses; infrastucture leakage index (ILI)	reduction of water losses; mathematical modeling; software related to consumption and anomalies
ATO 3 Marche	2	Macerata	Italy	Natural flow rate, groundwater level and seasonal variation, rainfalls amount, temperature, alcalinity, conductivity, nitrates			real-time data concerning water input in the network and water discharge
CNR	3	Bari	Italy	Microbiological parameters (Fecal indicators and pathogenic microorganisms), chemical constituents (DOC, pH, temperature, specific conductance), water depth in wells		groundwater scarcity, resources availability, climate change impacts, water quality	quality of surfaces and groundwaters, models and methodology to remove seawater intrusions, methods to improve the management of groundwater supply, groundwater modeling
Water Utility Nova Gorica	4	Nova Gorica	Slovenia	Flow, Pressure		comparison of flow rates and pressure measurements with hydraulic model	construction and installation of monitoring points, identification of areas with most losses
Water Utility of Istria	7	Buzet	Croatia	Flow, Pressure		Losses by m^3	reduction of water losses; energy consumption; fast detection of failures; mathematical modeling
Water Utility Neum + Hydro-Engineering	13 + 12	Neum + Sarajevo	Bosnia - Herzegovina	Flow, Pressure		unavoidable annual real losses, current annual real losses, infrastructure leakage	Reconstruction of 1500m pipelines, flow and pressure measurements implementation and water balance according to IWA Methodology
Public Utility Niksic	14	Niksic	Montenegro	Flow, Pressure			active loss control, reduction of water losses, reduction of illegal users, 20% reduction of distributed water

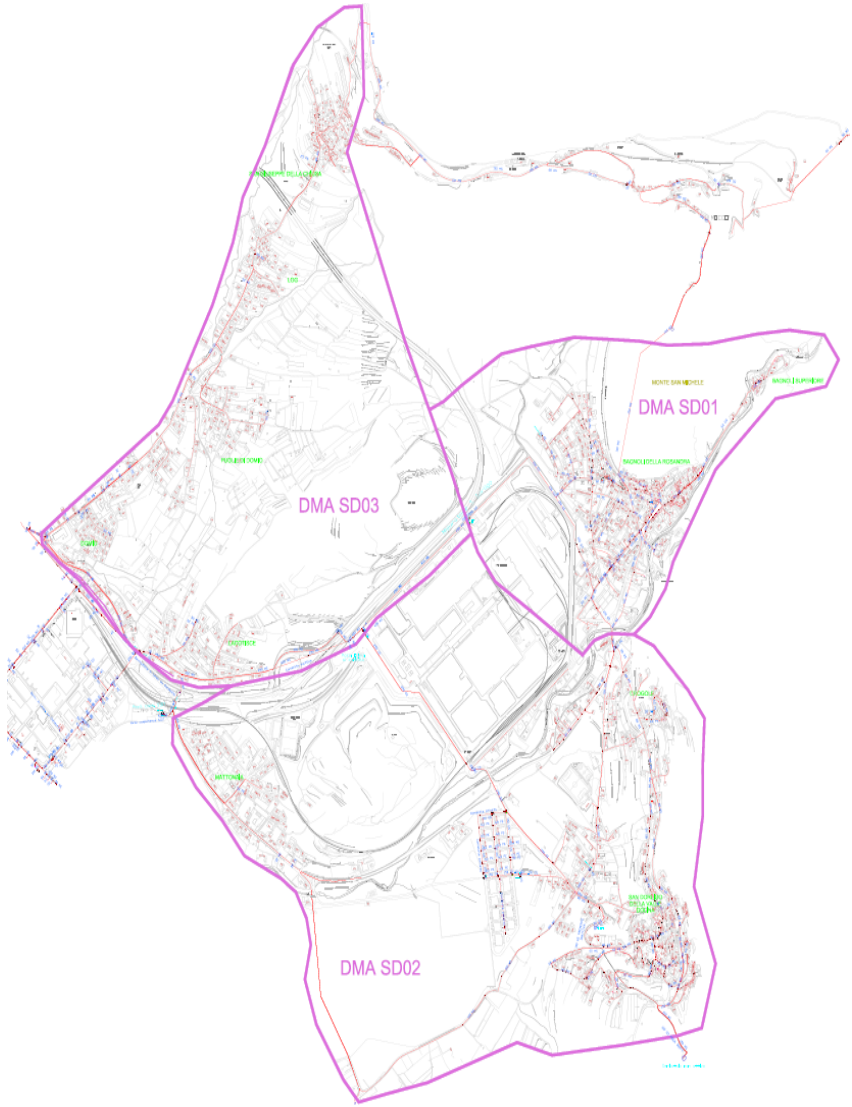
WP6 (VERITAS S.p.a., AcegasAps Amga S.p.a.)

District of San Dorligo della Valle: at the moment 90% of predicted activities have been done

- ✓ **9 operations**
- ✓ **Water losses reduction to 20-30%**
- ✓ **Operating pressure reduction**
- ✓ **Reduced wear on mechanical parts and pipes**
- ✓ **Reduction of energy 50.000 €/year**
- ✓ **Reduction of mantainance costs** by targeted and timely interventions
- ✓ **Lifting programs optimization**
- ✓ **Replicability** to AcegasApsAmga and DRINKADRIA partners networks
- ✓ **Water balance closure**

By the budgets:

- Engineering: € 115.831,00
- Equipments: € 207.515,00
- Investments: € 147.465,00



Have good and safe water

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