



Water management in the Netherlands: Challenges & Solutions

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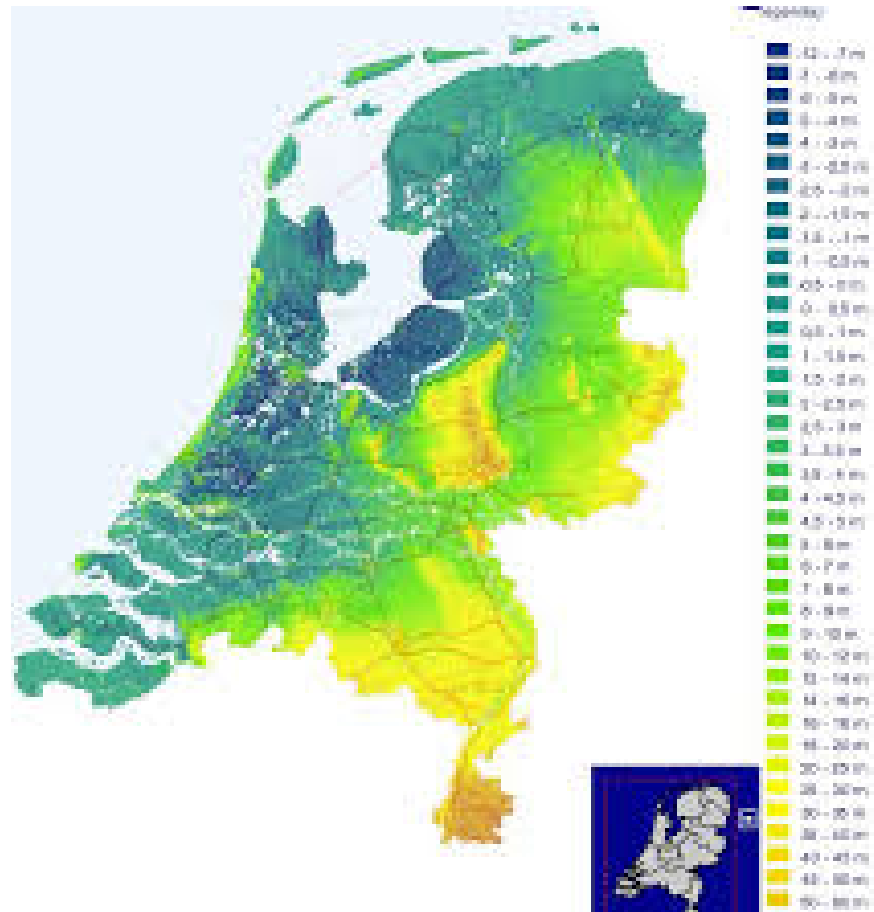
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TODAY

- Water management in The Netherlands
- Solutions
- Fit for the future?
- Financing Dutch Water Management
- Conclusions

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THE NETHERLANDS



## Institutional layers of water management in the Netherlands



### European level

#### European Union

Legislation and regulation for water, floods and the environment

#### International River Basin Commissions (Rhine, Scheldt, Meuse, Ems)

Cross-border water management

### National level

#### Ministry of Infrastructure and the Environment

Water, spatial planning and flood protection at national level  
Planning of the national water policy

Co-ordination with other policy areas (spatial planning, environment, economic development, agriculture, etc.)

#### National Water Authority

Operation and maintenance of main water system

### Provincial level

#### Provinces (12)

Integrated spatial and environmental planning  
Supervision of regional water authorities (RWAs)  
Groundwater regulation  
Co-ordination with other regional policy areas

### Watershed level

#### Regional water authorities (24)

Operation and management of regional water systems  
Flood defence  
Water quality & water quantity  
Wastewater transport & treatment

### Municipal level

#### Municipalities (408)

Local spatial planning  
Sewerage collection & wastewater transport  
Urban drainage  
Stormwater collection

## DUTCH WATER AUTHORITIES

Independent government body:

- 23 DWA (2600 in 1953)
- since 1122
- own legal power
- own tax system
- own elections
- Water management tasks:
  - flood protection
  - surface water quantity
  - surface water quality
  - waste water treatment
- not drinking water





## THE DUTCH SOLUTION TO CLIMATE CHANGE: THE DELTA PROGRAMME

- A **proactive** nationwide programme
- Cooperation between State, provinces, municipalities, Dutch Water Authorities, social organizations and the business community
- **Objective:**
  - to protect the Netherlands from flooding
  - to ensure adequate supplies of freshwater for generations ahead
- Completed by **2050**



## THE DELTA PROGRAMME

- Water Safety
- Fresh Water Supply
- New- build and restructuring



General programmes

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## STATE OF PLAY

- Budget Day 2014: Presentation of the Delta Programme
- 3 interrelated new measures:
  - new water safety standards;
  - sustainable fresh water provision;
  - climate-resilient design and water-robust construction.
- Two decisions on:
  - the Rhine-Meuse delta,
  - the Lake IJssel region.

**€ 20 billion**





## INDEPENDENT OECD STUDY

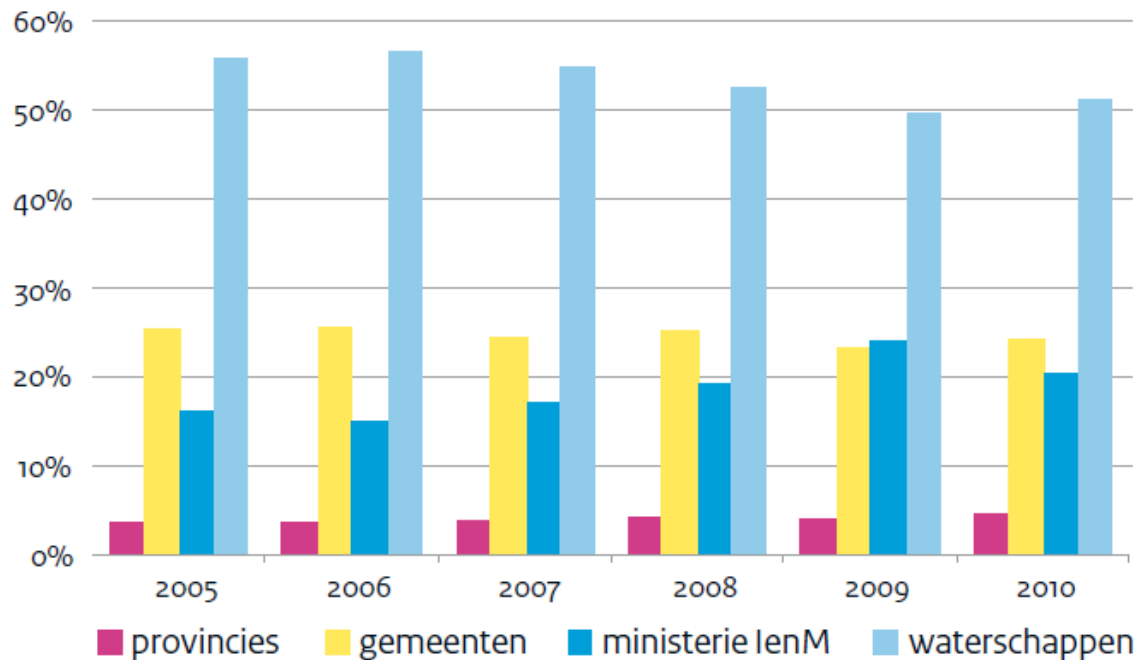
- Challenges clear, but is institutional framework up to date?
- Independent OECD review
- Think tank on 'governance issues'
- World wide water expertise

## OECD STUDY: FIT FOR THE FUTURE? KEY FINDINGS

- Striking “**awareness gap**”;
- Limitations caused by system of **checks and balances**;
- Concerns about **water quality**;
- *Weak economic incentives for management* “**too much**”, “**too little**” and “**too polluted**” water;
- Recommendation for better use and cooperation between water, land use and spatial development- in relation to **costs**;
- Recommendation for establishment of an **independent authority** to oversee the water governance in the Netherlands.



## FINANCING OF DUTCH WATER MANAGEMENT



Total budget  
2010:  
6 billion euro

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## REMAINING CHALLENGES

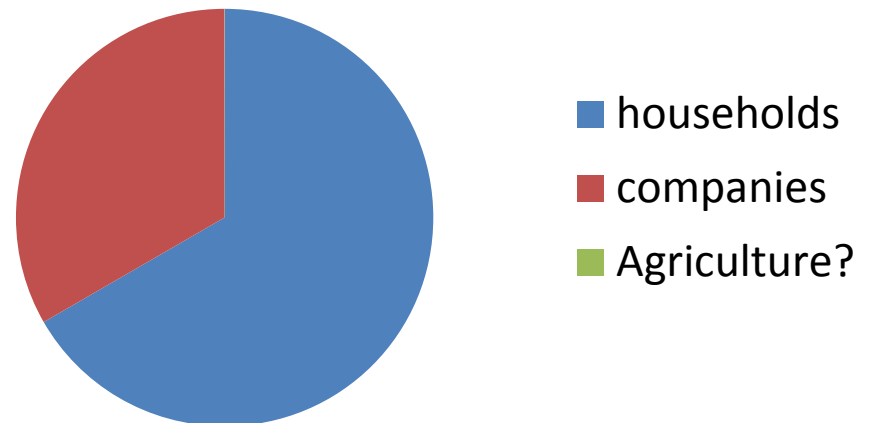
- Stricter application of *Polluter Pays Principle* and *User Pays Principle*,
- Equity considerations: among groups and regions,
- Greater policy coherence: lower societal costs,
- Improved transparency leads to cost efficiency.



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## CONCLUSIONS

- Water management is of national importance in the NL,
- Clear view on work to be done,
- Solid institutional framework,
- Key element: local, targeted financial system,
- Ongoing debate: who pays the bill?





THANK YOU FOR YOUR ATTENTION



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