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The Durme Valley River Restoration Plan

image: http://www.drogevoeten.be


http://trobken.weebly.com/durme.html

Durme Valley River Restoration Plan

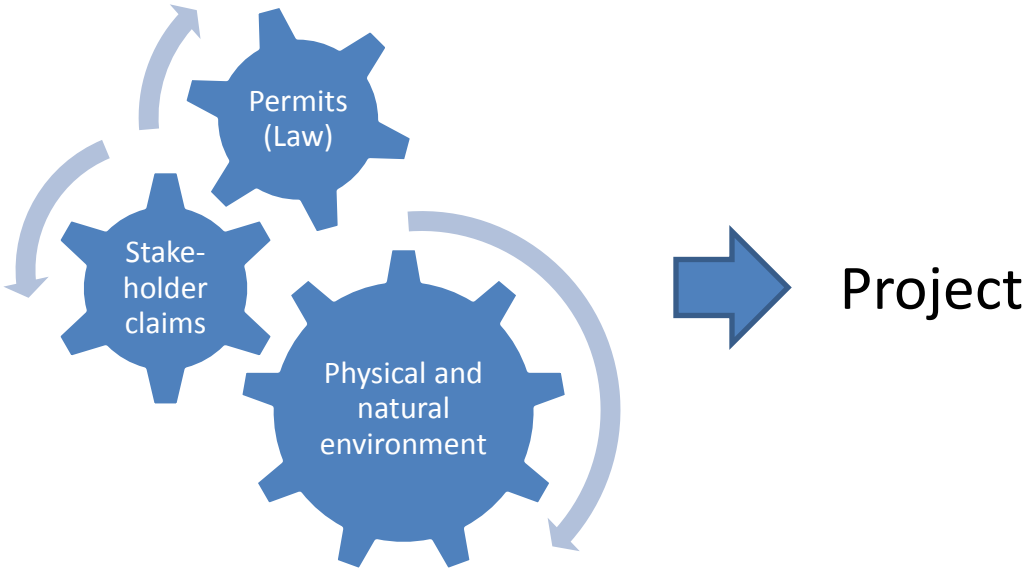
OVERVIEW

- **Objectives of the presentation**
  - Getting things done on the field from behind the desk
  - Finding the right balance between paper work, nature and stakeholder claims
- **Durme Valley River Restoration Plan**
  - Part of the Sigma Plan
  - Specific context of the Durme
  - Objectives of the River Restoration Plan
  - The River Restoration Plan
- **Return from experience**
  - Respecting nature and environment, and getting things done anyway
  - Legal issues
- **Lessons learned**

Objectives of the presentation

- **Getting things done on the field requires**
  - a lot of preparation behind the desk
  - many discussions around the table

- **Finding the right balance**



Sigma Plan

Safety & Nature in the Scheldt Estuary

project areas of the Sigma Plan

- **1976** (start) **– 2005** (actualisation) **– 2030** (completion)
- **500+ kilometers river dykes**
- **5,000 hectares flood control and nature areas**

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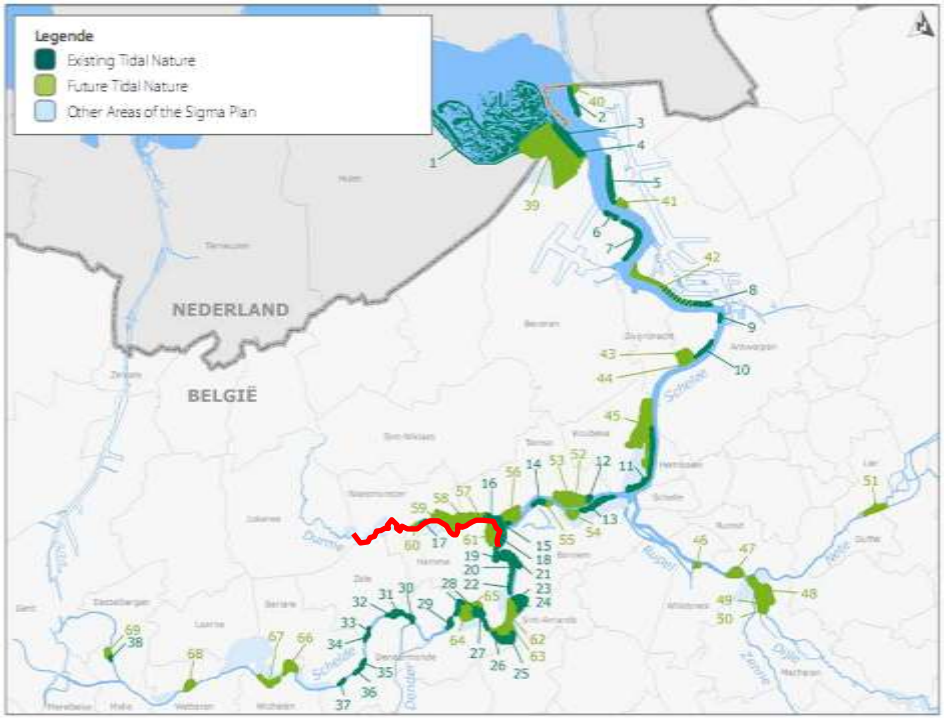
Sigma Plan

Enhancing European biodiversity

- **Natura 2000 in Flanders**
- **Scheldt Estuary**
  a self–sustaining ecosystem



existing and future tidal nature in the Scheldt estuary

FLANDERS

100,000 hectares
Special Protection Areas
Special Areas of Conservation

SIGMA PLAN

2,000 hectares tidal nature
3,000 hectares wetlands

DURME VALLEY

850 hectares
wetlands

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The Durme Valley

Specific context

- A tidal river between dikes
- Dammed at upstream part
- Silted up, with polluted sediment
- Changed tidal regime

- Loss of tidal marshes
- Dredging deposits on the marshes
- No gravitational drainage of polders
- Reduced discharge capacity, increased flood risk

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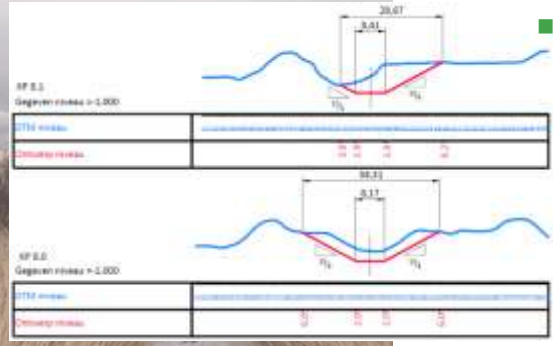
The Durme Valley River Restoration Plan
Objectives



- **A new cross-section to solve the problems**
  - Increase the discharge capacity
  - Remove dredging disposals
  - Rejuvenate substrate for development of tidal marshes
  - Restore gravitational discharge

- **Dredged sediment to realize the Sigma Plan**
  - Construction of protection dikes of controlled flood areas
  - Excess sediment to fill landfills and realize wetland nature

- **A sustainable solution**
  - Reconnect with upstream catchment through pumping station
  - Increased blow out through depoldering along the Durme

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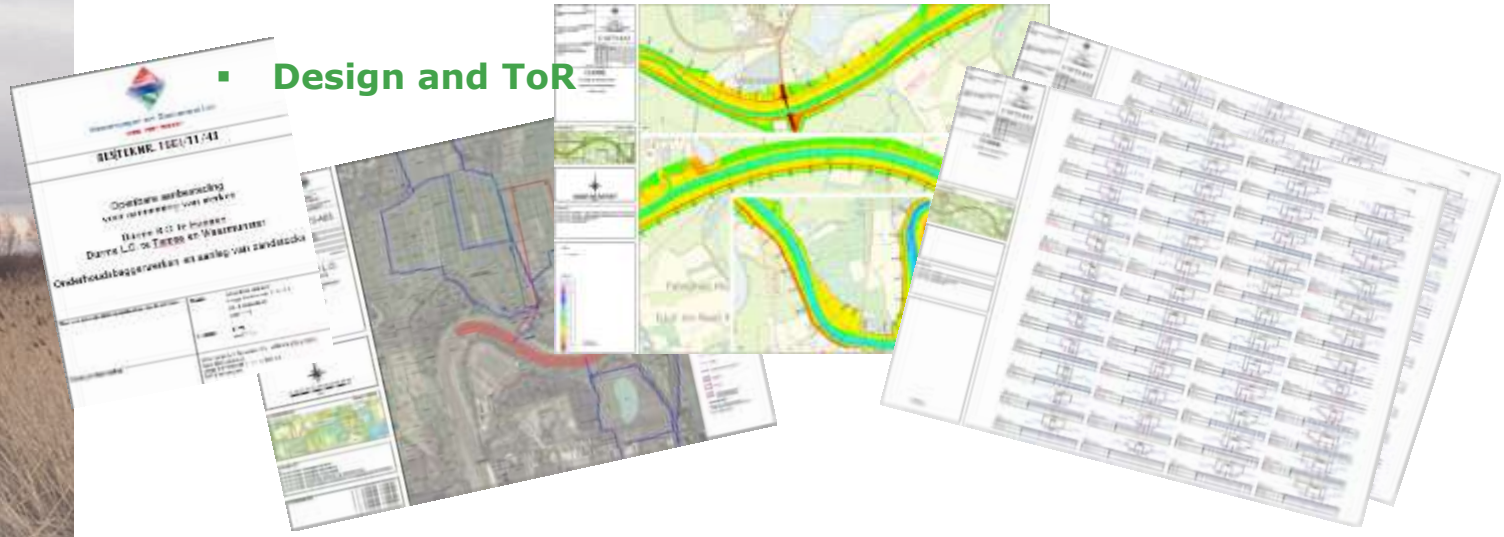
The Durme Valley River Restoration Plan

From plan to project



- **Design and ToR**

- **Permits/Assessments**
  - **Dredging**
    - afwijkingsaanvraag i.k.v. Natuurbesluit
    - afwijking i.k.v. Soortenbesluit
    - ontheffing van het VEN-regime
    - een passende beoordeling
  - **Sedimentation basin**
    - stedenbouwkundige vergunning
    - meldingsplicht scheidingsbekken
    - uitloogproef overloopwater
    - natuurvergunning
    - afwijking i.k.v. Soortenbesluit
    - ontheffing van het VEN-regime
  - **Sand stocks**
    - stedenbouwkundige vergunning
    - natuurvergunning
    - Milieuvergunning klasse 2
  - **Land fill (wetland)**
    - Milieuvergunning klasse 1
      - afwijkingsaanvraag
      - lozingsvergunning
      - impactstudie
    - Stedenbouwkundige vergunning
      - afwijking verbod wijziging vegetaties
      - natuurvergunning
      - afwijking soortenbesluit
      - ontheffing maatregelenbesluit
      - passende beoordeling
    - advies Cel MER: Project-MER :
      - niet duidelijk (cf. afwijkingsaanvraag)

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Return from experience
Respect

- **Taking stakeholders serious**
- **Municipalities/Polders**
  - Reluctant towards Sigma Plan
  - Our leverage:
    - reduce local flood problems by increasing discharge capacity
    - restore gravitational discharge
    - avoid nuissance by importing soil by road
- **Nature**
  - Accept temporary loss of tidal marshes as it is the best guarantee to realize the Sigma plan
  - Their leverage: a plan for the whole river:
    - sanitation of upstream polluted part
    - rejuvenation of dried marshes

Return from experience

Legal issues – getting things done anyway

- **Environment**
  - Accept exceedence of Zn-concentration – departure using BATNEEC technique on decision of the Flemish Governement – to realize Sigma Plan – which is a Governement decision
  - Their demand:
    - Spreading of pollution is under control
    - Provide monitoring and a back-up solution

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Lessons learned

Factors for a succeeding project

- **Stakeholder interaction**
  - Involve stakeholders from the start
  - Respect opinions
  - Solve disputes bilateraly
  - Search for win-win solutions
    - Give something in return, but don't put your project at stake
  - Let stakeholders participate in the plan
- **Environment**
  - Environmental legislation is severe
  - Find acceptable and feasible solutions (BATNEEC)
  - Prove that situation is under control
  - Foresee monitoring and back-up solutions
- **Legislation/Permitting**
  - It is not always clear whether and which permits are required
  - Is it better to be silent about it or to provide more than required?
    - It can be a matter of getting thing done (more quickly) or risk to shelve the project