



water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA



NOORDOEWER / VIOOLSDRIFT DAM (NVD) FEASIBILITY STUDY

Briefing to the Continuation of the Integrated Vaal River System Reconciliation Strategy Study (Phase 2) meeting

13 March 2019

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Study Manager

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Purpose of Noordoewer/Vioolsdrift Dam

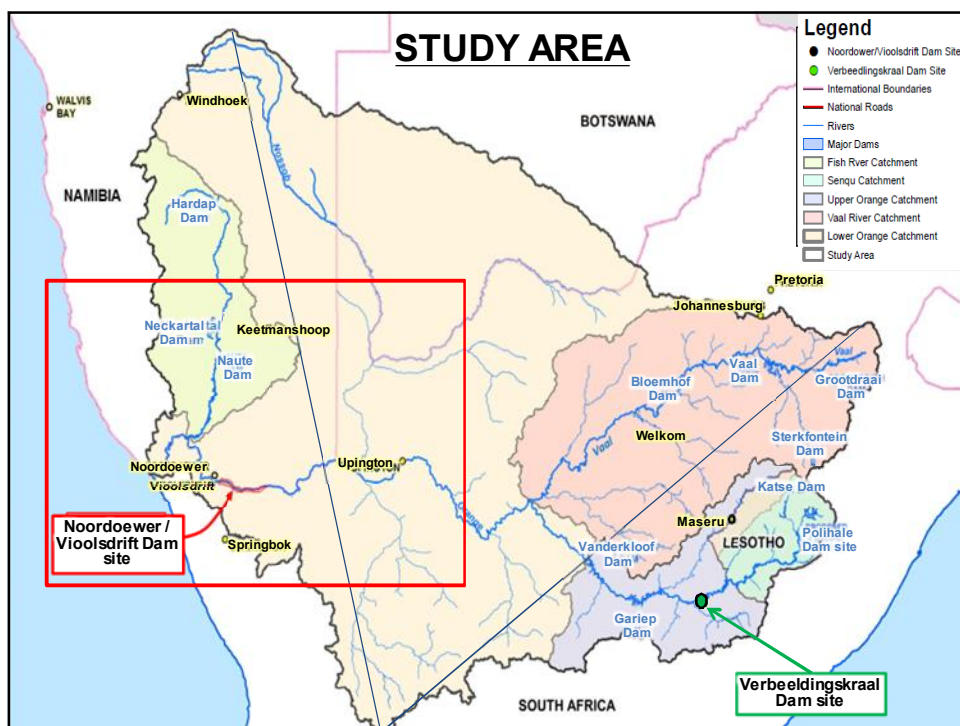
- 1. Replacement of loss in yield** due to impact of the Lesotho Highlands Water Project Phase 2 (Polihali Dam), which will transfer water to Vaal River in 2024.
- 2. Compensate for impact on yield** due to implementation of the Reserve in the Orange River (Prelim. 2018, Final 2024).
- 3. Provide re-regulation storage** in Lower Orange River - allow releases to correct seasonal flow distribution in accordance with the Ecological Reserve.
- 4. Provide additional system yield** to meet demands in the Orange River System, especially for large-scale Namibian irrigation and some RSA demands in the Lower Orange River.

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Progress to Date

- “ The NVD Study started in Sep 2015 and was planned to be completed by Aug 2017.
- “ Substantial progress with the work was achieved for the originally selected dam size of 2,800 million m³ (73 m)
- “ By June 2017, the study was nearing completion. 21 out of a total of 24 reports were produced in draft format and close to finalization and over 85% of the study budget was spent.
- “ The outstanding work was the completion of EIA, Legal and Institutional arrangements, Record of Implementation Decisions (RID) and Main Report.
- “ However, because of unforeseeable circumstances (Reserve water requirements), which became known in June 2017, the study stalled and completion was delayed.

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Further work required

- “ Owing to the revised EWR targets from the recent Reserve Determination study completed by DWS in June 2017, the selected large dam size will likely not receive environmental authorization from RSA.
- “ An alternative, smaller dam size (in the order of 450 million m³ to 650 million m³) needs to be investigated at an additional cost of about R7 Million.
- “ The study can be completed by end 2019, provided that the parties (Namibia and RSA) agree soon on the alternative dam size and if additional funds are available.

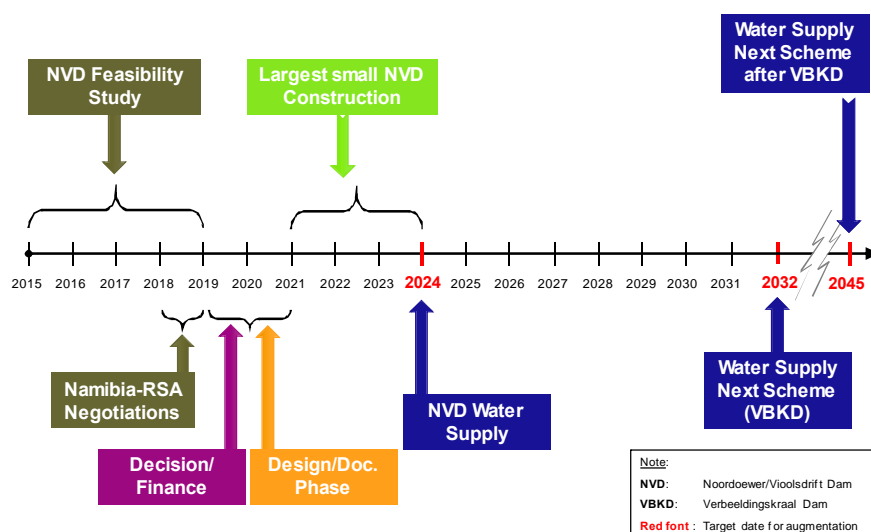
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Implementation programme: Largest Small NVD



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