



生まれ変わる武蔵水路

(首都圏の「水の大動脈」の機能を発揮しつつ、施設の長寿命化を実現した改築工事)

Rebirth of Musashi Canal

- Rehabilitation Works for Prolonging Life of the Facility Without Stopping Water Supply to Tokyo Metropolitan Area as the Water Aorta -

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概要

武蔵水路は、1967年に建設された利根川と荒川を結ぶ延長約14.5kmの水路で現在も首都圏の水道用水の約3分の1を供給する水の大動脈である。

建設から約50年の歳月を経た武蔵水路は、周辺の地盤沈下や老朽化によって通水能力が約3割低下したほか、耐震性能の不足、周辺地域の都市化による浸水被害発生リスクの増加といった深刻な課題が顕在化していた。

このため、武蔵水路の全面改築を行って通水機能を回復させるとともに、施設の長寿命化と耐震化および内水排除機能の強化を目的に改築工事が実施された。工事の実施にあたっては、首都圏を支える命の水を止めることができないため、20m³/sの都市用水を導水しながらの施工など発生するさまざまな制約条件を克服して改築工事を実施した。完成した施設は、地域の治水安全度を高め、持続可能な多目的水路へと生まれ変わった。

Summary

Musashi Canal, constructed in 1967, links the Tone River to the Ara River and the total length is 14.5 km, which conveys one third of domestic water necessary for Tokyo metropolitan area.

50 years has passed after the completion of Musashi Canal Project, approximately 30% of water conveyance ability had declined due to the land subsidence and decrepit of the canal. In addition, serious issues such as lack of seismic-proof and increase of the flood damage risk due to the urbanization in the region were realized.

Therefore, rehabilitation project has launched to recover the function of water conveyance ability. Also, functions of seismic proof and inner basin drainage were added through the rehabilitation project.

However, we could not stop domestic water supply to Tokyo metropolitan area, 20m³/s water conveyance was secured during rehabilitation period by introducing various civil engineering methods. Thus, the rehabilitation works were carried out under various restrictions to be overcome.

Rehabilitated Musashi canal has increased the safety level of flood control in the region and upgraded the original function with the sustainable function of the multi-purpose canal.

技術賞
Outstanding Civil Engineering
Achievement Award

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