

Spot Report: Flooding at the Polina Raiko House Museum Due to the Destruction of the Nova Kakhovka Dam on 6 June 2023



Smithsonian
Cultural Rescue Initiative



ukrainian heritage monitoring lab



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Executive Summary: Analysis of high-resolution satellite imagery confirms reports of flooding adjacent to the Polina Raiko House Museum in Oleshky, Ukraine, due to the destruction of the Nova Kakhovka Dam on 6 June 2023. This report has been prepared as part of the ongoing effort through the Conflict Observatory to monitor damage and destruction to cultural heritage sites in Ukraine following Russia's invasion in February 2022.

Background: The Nova Kakhovka Dam was constructed as part of the Kakhovka Hydroelectric Power Plant in Kherson Oblast along the Dnipro River in 1956. It supplied cooling water to the Zaporizhzhia Nuclear Power Plant as well as electricity and water to southern Ukraine.¹ The dam was destroyed while controlled by Russia's forces on 6 June 2023, causing extensive flooding and damage to the surrounding villages and landscape.²

The Polina Raiko House Museum, located in the town of Oleshky, was reportedly submerged and damaged in the flooding.³ The museum was home to the late self-taught Ukrainian artist Polina Raiko (1928–2004) and was founded in 2004, operating as part of the Kherson Contemporary Art Museum.⁴ The museum was filled with vibrant murals primarily depicting animal, floral, and religious motifs by the

¹ BBC (2023) 'Ukraine dam: What we know about Nova Kakhovka incident', *BBC*, 7 June. Available at: <https://www.bbc.com/news/world-europe-65818705> (Accessed: 8 June 2023); Keaten, J. (2023) 'Ukrainian dam breach: What's happening and what's at stake', *AP News*, 7 June. Available at: <https://apnews.com/article/kakhovka-dam-ukraine-russia-war-whats-at-stake-a417dafefa79462bef5e4e63c0a94c8c> (Accessed: 8 June 2023); Yerushalmy, J. (2023) 'Nova Kakhovka dam: everything you need to know about Ukraine's strategically important reservoir', *The Guardian*, 6 June. Available at: <https://www.theguardian.com/world/2023/jun/06/nova-kakhovka-dam-everything-you-need-to-know-about-ukraines-strategically-important-reservoir> (Accessed: 8 June 2023).

² Lakezina, V. (2023) 'War zone villagers flee after massive Ukraine dam destroyed', *Reuters*, 6 June. Available at: <https://www.reuters.com/world/europe/russia-says-it-thwarts-another-major-ukrainian-offensive-donetsk-2023-06-05/> (Accessed: 8 June 2023); Yerushalmy, 'Nova Kakhovka dam: everything you need to know about Ukraine's strategically important reservoir'.

³ Kishkovsky, S. (2023) 'Devastating dam collapse in Ukraine has apparently flooded house museum of late artist Polina Rayko', *The Art Newspaper*, 8 June. Available at: <https://www.theartnewspaper.com/2023/06/08/dam-collapse-in-ukraine-has-apparently-flooded-house-museum-of-late-artist-polina-rayko> (Accessed: 11 June 2023); *ArtReview* (2023) 'Artist's home, a Ukrainian national monument, 'destroyed' in dam floods', *ArtReview*, 8 June. Available at: <https://artreview.com/artists-home-a-ukrainian-national-monument-destroyed-in-dam-floods/> (Accessed: 11 June 2023); Graham-Harrison, E. (2023) "'Masterpiece' house is latest victim of Putin's war on Ukrainian heritage", *The Guardian*, 12 June. Available at: <https://www.theguardian.com/world/2023/jun/12/masterpiece-house-is-latest-victim-of-putins-war-on-ukrainian-heritage> (Accessed: 12 June 2023); *USA Art News* (2023) 'Devastating dam collapse in Ukraine has apparently flooded house museum of late artist Polina Rayko', *USA Art News*, 8 June. Available at: <https://usaartnews.com/news/devastating-dam-collapse-in-ukraine-has-apparently-flooded-house-museum-of-late-artist-polina-rayko> (Accessed: 11 June 2023); Kherson Regional Charitable Fund named after Polina Raiko [Facebook] 27 June. Available at: <https://www.facebook.com/polinaraikocom/posts/pfbid0TeVwW9uxYQvto9HVknAeVHcEu8HVXqUsre37nw22RME6AUQdkpnB1ae8TK59mgvVl> (Accessed: 29 June 2023).

⁴ Kherson Regional Charitable Fund named after Polina Raiko (2023) *Kherson Regional Charitable Fund named after Polina Raiko*. Available at: <https://polinaraiko.com/found/> (Accessed: 16 June 2023).

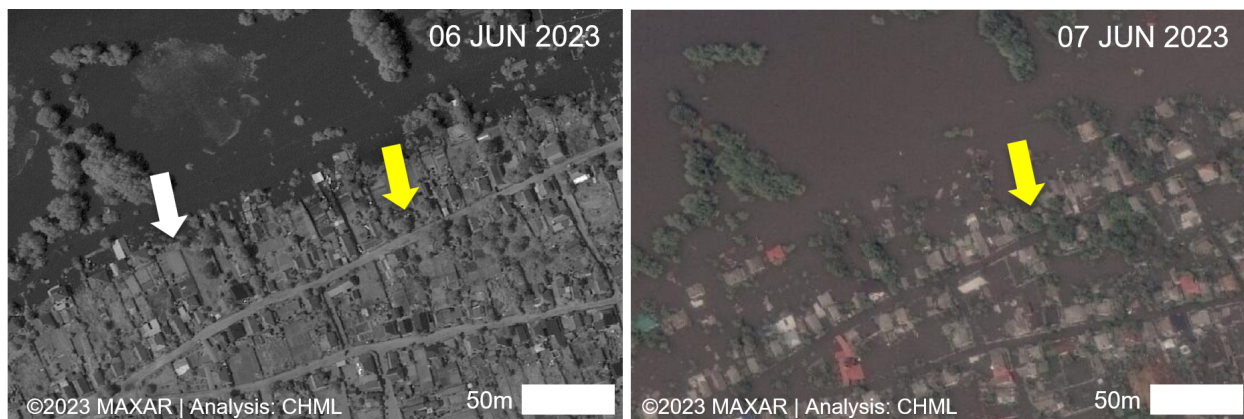
artist. These were intended to aid in processing her grief from family trauma.⁵ The artist's painting of a dove at this museum has come to symbolize the Ukrainian resistance following the full-scale invasion by Russian forces in 2022.⁶

The information for this report was gathered using high-resolution satellite imagery to confirm reports from the Ukrainian Heritage Monitoring Lab (HeMo).

Findings: Preliminary analysis using available high-resolution satellite imagery confirms flooding near the Polina Raiko House Museum.



Images 1–2. On the left, a satellite image of the Polina Raiko House Museum (yellow arrow) on 15 May 2023 shows the waterline (white arrow) prior to flooding. On the right, a satellite image of the museum (yellow arrow) on 31 May 2023 also shows the pre-flood waterline (white arrow).



Images 3–4. On the left, a satellite image of the Polina Raiko House Museum (yellow arrow) on 6 June 2023 shows the waterline (white arrow) reaching within 20 m of the museum. On the right, a satellite image of the museum (yellow arrow) on 7 June 2023 shows the museum and surrounding neighborhood inundated by water.

⁵ *Metro.Style* (2022) 'Inside Ukrainian (sic) Artist, Polina Rayko's Home Of Healing', *Metro.Style*, 15 March. Available at: <https://metro.style/living/home-tours/polina-rayko-house/32602> (Accessed: 11 June 2023); Solomon, T. (2023) 'Catastrophic Dam Collapse in Ukraine Floods Beloved Artist House Museum', *ARTNews*, 9 June. Available at: <https://www.artnews.com/art-news/news/house-museum-of-polina-rayko-flooded-in-ukraine-dam-collapse-1234670925/> (Accessed: 11 June 2023).

⁶ Kishkovsky, 'Devastating dam collapse in Ukraine has apparently flooded house museum of late artist Polina Rayko'; Solomon, 'Catastrophic Dam Collapse in Ukraine Floods Beloved Artist House Museum'.



Images 5–6. On the left, a satellite image from 8 June 2023 shows the Polina Raiko House Museum (yellow arrow) and surrounding area still inundated. Visibility in this image is lower due to cloud cover; however, water can be identified surrounding the museum. On the right, a satellite image of the museum (yellow arrow) on 17 June 2023 shows that the waterline (white arrow) had receded north of the museum.

This monitoring effort uses cultural heritage inventory data developed by the Ukrainian Heritage Monitoring Lab (HeMo) in Ukraine, the Smithsonian Cultural Rescue Initiative (SCRI) at the Smithsonian Institution, the Cultural Heritage Monitoring Lab (CHML) at the Virginia Museum of Natural History, and the Center for International Development and Conflict Management (CIDCM) at the University of Maryland under the Cultural Heritage Site List (CHSL) data standards developed by the Penn Cultural Heritage Center (PennCHC) at the University of Pennsylvania Museum with National Science Foundation Grant #1439549. Support was provided by the Bureau of Conflict and Stabilization Operations at the U.S. Department of State. Views expressed in this report represent those of the authors alone and do not necessarily reflect the views of the U.S. government. Learn more at <https://conflictobservatory.org>. Visit <https://www.heritage.in.ua/> for information on HeMo, <https://www.vmnh.net/research-collections/chml> for information on CHML, <https://culturalrescue.si.edu/> for information on SCRI, <https://cidcm.umd.edu> for information on CIDCM, and <https://www.penn.museum/sites/chc/> for information on the PennCHC.

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