Background on Proposed Dark Hollow Dam

FACT SHEET #1 — The Proposed Dark Hollow Dam and Neshaminy Creek Stormwater Management

Bucks County and the United States Department of Agriculture's Natural Resources Conservation Service are considering the construction of a dam across the main stem of the Neshaminy Creek at Dark Hollow near the border of Buckingham and Warwick Townships. The dam was conceived three decades ago as part of a larger flood control project but was cancelled in the late 1980's when found to be environmentally and economically unfeasible. Recent flooding in the lower Neshaminy and renewed contact by the NRCS have rekindled interest in building the dam.

Time Line:
1955: Flood of record in Neshaminy Creek basin resulting from record rainfall and record high tides in the upper Delaware River.


1970's and 80's: Eight of the ten structures are completed by the Neshaminy Water Resources Authority (NWRA), the county agency carrying out the Work Plan. A small dam planned for the Little Neshaminy in Montgomery County (PA 610) and the Dark Hollow Dam (PA 614) were put on hold. The Dark Hollow Dam, the only main stem structure, was postponed due to controversy over its environmental impacts and its questionable effectiveness for controlling flooding in the most flood-prone sections of the watershed.

1987: Cost Benefit Analysis issued by NWRA concludes that the Dark Hollow Dam is not cost-beneficial, employing the criteria used by the federal government. Stormwater management, floodplain protection, local site and area-specific structural measures such as berming, floodproofing and structure buy-outs were offered by the NWRA as alternatives to be considered by the County. NWRA secured state funding and began the development of the Neshaminy Creek Stormwater Management Plan under PA's Stormwater Management Act to prevent run-off and flooding in the watershed.

1988: NWRA passed resolution to cancel Dark Hollow Dam project and designate the site as a county park.
1989: County Commissioners notified SCS that they will not build Dark Hollow Dam and held ceremony designating Dark Hollow Park.

1990: Neshaminy Creek Stormwater Management Plan issued by Bucks County Planning Commission after six years of study and inter-governmental planning. The Plan offered non-structural means for managing stormwater run-off, maximizing groundwater recharge, maintaining/improving water quality, and preserving natural waterways in the Neshaminy Watershed. However, this plan has never been implemented.

1996: Heavy rainfall, as much as nine inches in four hours, caused the worst flooding for many years in the lower Neshaminy Creek. SCS, renamed the Natural Resources Conservation Service, contacted Bucks County, telling them funding for the construction of Dark Hollow Dam will expire unless a new Watershed Work Plan is signed.

1997: NRCS and Bucks County begin the development of an updated Watershed Work Plan to study solutions to flooding, a Steering Committee is formed by the County to guide the process, and public hearings are held.

1998: In January -- Steering Committee calls for public input.

THE PROPOSED DAM
Type: Dry Dam (no permanent pool) for flood control, compacted earthen fill with a concrete principal spillway and a concrete shute emergency spillway.

Location: Approx. 1000 ft. upstream of Dark Hollow Rd. on Neshaminy Creek, Warwick Township

Description: 56 foot high earthen dam spanning Dark Hollow

Length of creek to be covered by dam: 300 feet

Drainage Area to feed impoundment: 58.6 square miles

Storage Capacity: floodwater: 7,311 acre feet; sediment: 689 acre feet

Surface area of inundation area: 545 acres, all vegetation cleared to 50 yr. flood level

Maximum floodpool area: 610 acres

Emergency concrete spillway bottom width: 450 feet

Rock type: Locatong Formation V, steep slopes

Vegetation: Lowland hardwoods, upland hardwoods, hedgerows, cultivated fields. Wetlands survey needed.

Flora and Fauna: No endangered or special interest species inventory performed--some rare species reported.