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Conclusion

Between 1972 and 2008, the Philadelphia District underwent numerous changes—in the scope and variety of its missions, in the size and composition of its workforce, in its organizational relationship with the Marine Design Center, and even in the location of its home office. In 1972, the district had many civil works projects on the horizon, most of them related to the Delaware River Basin Comprehensive Plan. The district was preparing to begin construction on Tocks Island Dam, the linchpin of the comprehensive plan, and was working on other dams at Blue Marsh and Beltzville, with one at Trexler in the planning stages. The district was just beginning a fledgling regulatory program based on new responsibilities given to it by the Clean Water Act. It had no military construction program at the time and, even though it would provide much aid in 1972 after Hurricane Agnes ravaged the eastern coast, it did not have a specific emergency management program. Consisting of approximately six hundred employees and housed in the Customs House, the district primarily focused on navigation and flood control.

By 2008, much of this picture had changed, although certain trends persisted. Navigation was still at the core of the district's civil works program. Within the Corps, the district had long been strongly identified with dredging, hydrographic surveying, and marine design. That was still the case. Although down from its previous fleet of three seagoing hopper

Facing page: The Philadelphia District—which owns more high-level highway bridges (five) than any other Corps district—has been designated a center of expertise for Bridge Inspection and Evaluation, with structural engineers and rope access technicians certified for short span and high-level complex bridges

The C&D Canal at Chesapeake City, Maryland, where District dispatchers monitor and control ship traffic 24/7

dredges, the district still claimed one of only four such dredges owned and operated by the Corps. While one major waterway deepening project was halted in the design stage and another experienced many delays before reaching construction, annual maintenance of those two channels continued without incident. Although the Marine Design Center was now officially separate from the Philadelphia District, it had always been a national resource, and its mission (like its location) remained essentially the same.

"Flood control" in the historic sense no longer took center stage at the district. The concept of "control" had evolved to the more modest and realistic goal of reducing risk and was applied increasingly to coastal storms as well as floods. Soft structures—those more imitative of nature—had come to be preferred over traditional hard structures such as dams and culverts. Most significantly, the district's civil construction workload had experienced a strong eastward shift toward the Atlantic Coast. In a little more than a decade, the district went from dedicating its last dam and reservoir (Blue Marsh Lake, 1979) to beginning its first beach nourishment project (Cape May, 1990). By 2008, eleven of these projects were in place along the New Jersey and Delaware shorelines, and more were being developed.

The end of the dam-building era was a national trend extending far beyond the Tocks Island and Trexler projects. It was linked to the rise of the environmental movement and its influence on the nation's water policy, which subjected Corps projects to more scrutiny than ever and killed some projects that originally seemed to be viable solutions. Yet that same movement and its focus on maintaining the nation's environmental quality would ultimately result in an increase in the district's missions and workload, especially in terms of Superfund cleanup and the implementation of ecosystem restoration projects.

In 2008, the Philadelphia District, with a new home in the Wanamaker Building, had reclaimed a major part of its

historical workload that had been transferred elsewhere by 1972: a flourishing military construction program. In 2009, Philadelphia was again designated a Military District. Two other elements that had historically been present—responding to disasters and working for other agencies and governments—were now represented by a permanent branch and a third major mission area, respectively. After 11 September 2001, the Emergency Management Branch's oversight expanded from disaster to contingency operations; during one stretch, it managed deployments to both the Gulf of Mexico and the Persian Gulf. In terms of total project dollars, in some years the district's Support for Others program surpassed both civil works and MILCON.

Through all of these changes, the Philadelphia District maintained its commitment to excellent service to its customers and to the nation as a whole. Its trademark responsiveness, coupled with flexibility, proved indispensable in the pivotal 1970s and beyond, especially with regard to the challenge

Sunrise at Blue Marsh Lake

The District-built Schuylkill River Park recreation trail at Market Street Bridge, Philadelphia

of adaptation. This responsiveness was apparent in the district's readiness to assume military construction responsibilities when asked and to be able to shuffle the bases on which it worked as needed. It was also shown in the way the district responded to environmental changes in the United States, adapting to reordered priorities in its civil works program and developing innovative ways to fight flooding and keep waterways viable with minimal environmental impact. Across all sectors of its business, the district applied its collective ingenuity and resourcefulness to produce better solutions: using dolosse and CORE-LOC to strengthen the jetties flanking Manasquan Inlet, combining beach nourishment and freshwater wetland restoration to save Lower Cape May Meadows for migratory birds, building a sand bypass plant at Indian River Inlet to continuously counteract littoral drift, constructing one wastewater treatment plant to serve both Fort Dix and McGuire Air Force Base, and renovating and upgrading a fish ladder in the heart of Philadelphia so shad and other native species could flourish again as they did at the nation's founding. Willing to embrace new technology and new applications, the Philadelphia District was well poised to adjust to the dynamism of water policy in the late twentieth and early twenty-first centuries.

Groundbreaking for the C-17 Flight Simulator Facility, Dover Air Force Base, 2006

Challenges remained, of course. Even though the district worked diligently not only to comply with environmental laws and regulations but also to address public concerns, it still faced opposition in some of the work Congress asked it to perform. This opposition led to project delays (as with the Delaware River main channel project); personal attacks on Corps

officials (as with the Tocks Island project); and even unfavorable publicity from both sides of an issue, with the district alternately labeled as hostile to environmental needs or to property rights (as sometimes happened with the regulatory program). No matter how hard the Corps worked to satisfy all interests in a project, it seemed that at least one group always remained dissatisfied. The Philadelphia District persisted in reaching out and doing what it could to hear and consider interested parties' concerns—over time building trust and respect, if not agreement, with some of those in opposition.

The fluctuations in the district's workload also proved to be challenging, especially in the early 1980s, when the district was downsized after the cancellation of the Tocks Island project and the district engineer position was reduced from a colonel to a lieutenant colonel, and in the early 1990s, when a general Corps restructuring targeted the district

Hikers behind the dune—placed for both economic and environmental benefit—in Cape May Meadows State Park, with the Cape May Point Lighthouse in the background

for closure. Such events led to an unsettled feeling in the district that was, at times, compounded by changes in its workload. Having Corps leadership take away missions and functions and later return them (such as with design work in the 1980s and the military mission in general) detracted from a sense of continuity in the district. Thus, the same events that enabled the district to become more flexible and responsive in its work also created difficulties.

The Philadelphia District dealt with these fluctuating workloads and responsibilities through solid internal teamwork and as part of a larger Corps team that included other districts in the North Atlantic Division. In the twenty-first century, this teamwork took the form of regionalization and the USACE 2012 initiative, which promoted working across districts and across division boundaries in an attempt to eliminate the "stove-pipe" perception of the Corps. In contrast to past reorganizations that diminished the Philadelphia District's roles and responsibilities, these changes had a positive overall effect on the district's workload. The most prominent

The vertical lift bridge at the former Philadelphia Naval Shipyard, after complete renovation by the District for the United States Coast Guard

example was the C4ISR program at Aberdeen Proving Ground, which Philadelphia took on as part of a division-wide project reallocation to handle the MILCON surge stemming from BRAC 2005.

As the Philadelphia District moved into the twenty-first century, its future looked bright. The district was poised to continue its strong environmental work in terms of Superfund cleanup, ecosystem restoration, and wetlands permitting, having developed a large amount of expertise in these fields over the preceding years. Likewise, the district would continue its dredging and navigation functions in the waterways under its jurisdiction and along the coastline, and would continue to use its expertise in beach nourishment projects to protect the shorelines of New Jersey and Delaware. Flood control would still to be an important component of the district's work, although the forms such work took would continue to evolve. The military construction mission was set to become an even larger element of the district's responsibilities, in both project management and contracting, in part because of the excellent work the district had done for years at Fort Dix, McGuire Air Force Base, and Dover Air Force Base. The district would also continue to offer its expertise and experience to a host of other federal, state, and local agencies.

By 2008, the Philadelphia District had built a solid reputation on its ability to adjust to the context of the times while still providing responsive and reliable service to its clients. This flexibility would serve the district well as it carried its legacy into a new century.

Lieutenant General Robert B. Flowers, Chief of Engineers from 2000 to 2004, consults a map on the McFarland *with dredge master Captain Karl Van Florcke*