

Remarks for BG Arnold  
Dallas Chapter, Consulting Engineers Council  
31 July 2000

- I am happy to be here today and appreciate this opportunity to talk with you about the

- U.S. Army Corps of Engineers... how we got started, some of our early work, our plans for the future and how my Southwestern Division fits into the big picture

- The Corps' mission to provide quality, responsive engineering services to the nation

began in 1775 with the task of building fortifications at Bunker Hill

-- With the founding of West Point in 1802, the Corps began a tradition of military and civil works missions that continues today

- In the 19<sup>th</sup> century, the Corps built coastal fortifications, improved harbors, surveyed roads and canals, explored and mapped the western frontier, eliminated navigation hazards on the Mississippi, Ohio and other rivers, preserved and protected natural resources like Yellowstone Park, constructed buildings and monuments in the nation's capitol, and provided water for the District of Columbia

- The President also called upon the Corps to take over supervision of the Panama Canal construction in the early 1900s

- During World Wars I and II, the Corps assumed responsibility for constructing all essential military facilities

-- Including the Alaska Highway and the design and construction of the Manhattan Project facilities

- In 1937, the Southwestern Division was established in response to large-scale projects authorized by the Flood

Control Act of 1936 and the New Deal public works spending legislation

-- During the 40s, SWD's focus shifted to war efforts, constructing myriad facilities. At the conclusion of WWII, the division had responsibility for one-fifth of the Corps' total construction budget

- Following war efforts, the Corps' military construction program continued throughout the decade during the Cold War, with projects ranging from construction of missile launching facilities to early warning systems in other countries

-- The Corps also took on the other nation-building programs that began with economic recovery in Greece and other European, North African and Asian nations.

--- Another significant effort was the \$14 billion reimbursable program of building military and public services infrastructure in Saudi Arabia

- And, our civil works mission evolved during this same time with Congress adding hydroelectric power generation, water supply. Recreation and environmental protection to our responsibilities
- Today, the Corps' organization includes our headquarters in Washington DC, 8 national Division offices, like SWD, and 41 subordinate Districts throughout the U.S., Asia and Europe

-- The Southwestern Division, headquartered here in Dallas, includes all or part of 7 states with District offices in Fort Worth, Galveston, Little Rock and Tulsa. We manage 2.3 million acres of public land and water... with annual programs totaling just over \$1 billion

-- The Corps' total workforce numbers about 34,000 civilians and 650 military personnel... scientists, engineers, geologists, hydrologists, natural resource managers and other professionals... with SWD's staff totaling 3,2000

- This diverse worldwide workforce

- Plans, designs, builds and operates water resources and other Civil Works projects for several purposes

- First, of course, is Flood Control

- For example, SWD manages a system of dams, levees, channels and local flood protection projects that prevents an average of \$1.3 billion in cumulative flood damages each year

- San Antonio Tunnel

- You've probably heard of our Dallas Floodway Extension project... we're also reviewing comments on a Final Programmatic Environmental Impact Statement that addresses proposed activities to provide flood damage reduction, environmental restoration, recreation and other allied purposes within the Trinity River basin

- In addition to flood control, our 90 lakes divisionwide also provide water supply and quality recreation opportunities

- And, SWD's 18 hydropower plants produce 87% of the hydropower for this region... serving nearly 7 million people

- Navigation is also an integral part of our Civil Works mission

- Within SWD are two major waterways, the McClennan-Kerr Arkansas River Navigation System and the Gulf Intracoastal Waterway, both among the most cost-efficient in the nation

- More than one-half billion tons of commerce are shipped annually over SWD's nearly 1,500 miles of channels, ranking us second in the Corps for navigation

--- Within the division are 12 deep-draft and 22 shallow-draft ports... with 3 of the nation's top 10 ports relying on us for channel maintenance

--- We're currently deepening both the Houston and Galveston Ship Channels to 45 feet... and widening the Houston Channel from 400 to 530 feet

--- And, to solve a chronic low-water problem on the entrance to the McClellan-Kerr, we're overseeing construction of Montgomery Point Lock and Dam... a \$242 million project that should be operational by 2002

--- Environmental protection is key in all projects... including innovative design for new ones, minimizing impact of dredging... often times providing additional wildlife habitat... and restoring the natural environment from past abuses

--- And importantly, when disasters strike, the Corps is among the first to respond, helping get recovery efforts started

---- We in SWD respond, whether the need is within or beyond our boundaries.

Last year we deployed to Oklahoma and Arkansas after the devastating tornadoes... and a few months before, supported flood response activities in Del Rio... as well as assisting with cleanup efforts following Hurricane Georges in Puerto Rico

--- In addition to Civil Works, the Corps' military construction mission provides design and construction management of facilities for the Army and Air Force

--- Nearly one-fifth of the U.S.'s military activities are located within SWD... 12 Air Force and 11 Army installations

--- We design and build new facilities, rehab older ones and assist public works directors with engineering problems

--- The division also is responsible for 181 projects as part of the Department of Defense's environmental stewardship or improvement activities and 71 Formerly Used Defense Site program locations

--- The Corps also provides design and construction management support for other Department of Defense and federal agencies

--- Just one example, SWD is meeting the needs of the Immigration and Naturalization Service by providing facilities for detainment camps, border patrol stations and support structures

- And certainly, the private sector is an essential element of the Corps team... with the Corps employing private A-E and construction firms for most design and all construction work

-- This partnership represents an immediate force multiplier of several hundred thousand architects, engineers and builders and is a major contributor to preserving peace and improving quality of life

- The Corps has served the nation in various ways and met some major challenges for the past 225 years... more lie ahead
- We've identified 6 specific water resources challenges and are actively soliciting ideas to define needs and find solutions
- In fact, the Corps is hosting "listening sessions" nationwide to begin a dialogue on these challenges with interested groups and individuals
- Our session will take place on August 10<sup>th</sup> at the Arlington Convention Center, from 9 a.m. to 3 p.m., where we'll discuss
- For instance, the fact that our nation's water highway system may not be able to meet 21<sup>st</sup> century demands

--- America's marine transportation system moves \$1 trillion of freight each year. It supports commercial and recreational

fishing industries that contribute \$111 billion to state economics while reducing pollution and congestion on roads and railways

--- Tonnage passing through harbors is expected to double in the next 20 years and much of our system is working at near capacity

--- Without deeper ports and modernized locks our nation will endure consequences of

---- increased costs to consumers of imports like clothing, electronics, and oil

---- decreased competitiveness and loss of jobs in farming, mining and shipping

---- loss of export markets, which in turn will impact the balance of trade and global competitiveness, and

---- reduced ability to deploy and resupply military forces

--- Flooding continues to threaten our nation's communities

--- America has made a major investment in flood damage reduction

--- Nearly 400 lakes and reservoirs, 8,500 miles of levees and dikes, and hundreds of smaller, local projects have prevented nearly \$500 billion in flood damages since 1950. Every dollar invested prevents almost \$6 in damages

--- But, our nation still spends an average \$4 billion per year on flood damages. And flooding, the most common and costly natural disaster, is worsening as development continues in flood-prone areas and along coastlines.

-- And now is the time to repair our damaged environment

---Until the National Environmental Policy Act of 1970, economic development took precedence over environmental considerations

--- Water resource projects built today include environmental protection but much needs to be done to clean up, restore and improve past actions

--- More than half of our nation's wetlands that help reduce flood damage, protect shorelines from erosion, improve water quality and serve as spawning grounds for numerous species have been lost since Colonial times

-- Many communities lack adequate water and sewer systems necessary for growth

-- Flight to suburbs has left cities with deteriorating infrastructure and abandoned industrial sites known as "brownfields"

-- Many cities lack funds to upgrade water distribution systems... redevelopment, which could provide needed revenues... is impossible without modernized infrastructure. Same is true for poor rural areas.

-- And, many urban areas may face chronic water shortages

--- Texas is actively working a solution for this challenge through Senate Bill 1... and SWD has been involved in this initiative since the beginning, providing information and assistance

---- Briefly, for those of you who may not know, this is comprehensive water legislation that establishes a "bottom-up" water planning process designed to ensure that the future water needs of all Texans are met

----- A consortium of representatives from different interest groups are preparing regional plans for each of their respective areas... with 16 regions identified statewide

----- The regional plans must be adopted by early January and the Texas Water Development Board must approve and incorporate them into a statewide plan by 5 January, 2002. The plans will then be updated every 5 years

-- Another challenge... American's water resources infrastructure may not support future generations

--- Water infrastructure... supply and treatment systems, flood protection works, transportation systems, hydropower facilities and recreation sites... contributes to our quality of life and prosperity

-- Unfortunately, national investment has not kept pace with economic and social expansion

--- And, finally, our nation's capability to respond to natural disasters is being stretched

--- Natural disasters and other national emergencies are expensive and destructive. Natural disasters cost a staggering \$300 million a week in economic losses, plus indirect costs

--- A rapid and effective emergency management response is required to give people back their lives

- Each of these challenges directly affect a;; of us here today... and the Corps is working to find solutions

-- We'd like to hear your ideas and invite you to join us on the 10th

- So, that's a back-of-the-envelope look at the Corps as a whole... we've provided diverse service to our nation... and we must continue to be good stewards of federal resources, both funds and the environment. Our nation expects and requires that of us.

- To wrap up, there is still much work to be done by the Corps... to meet the challenges I mentioned, as well as other diverse issues like ensuring equitable distribution of our ample water supply, balancing development needs while preserving the

environment, and helping to ensure our troops are trained and ready with a high quality of life for them and their families

- Again, it has been a pleasure for me to be here with you this afternoon. Thank you.