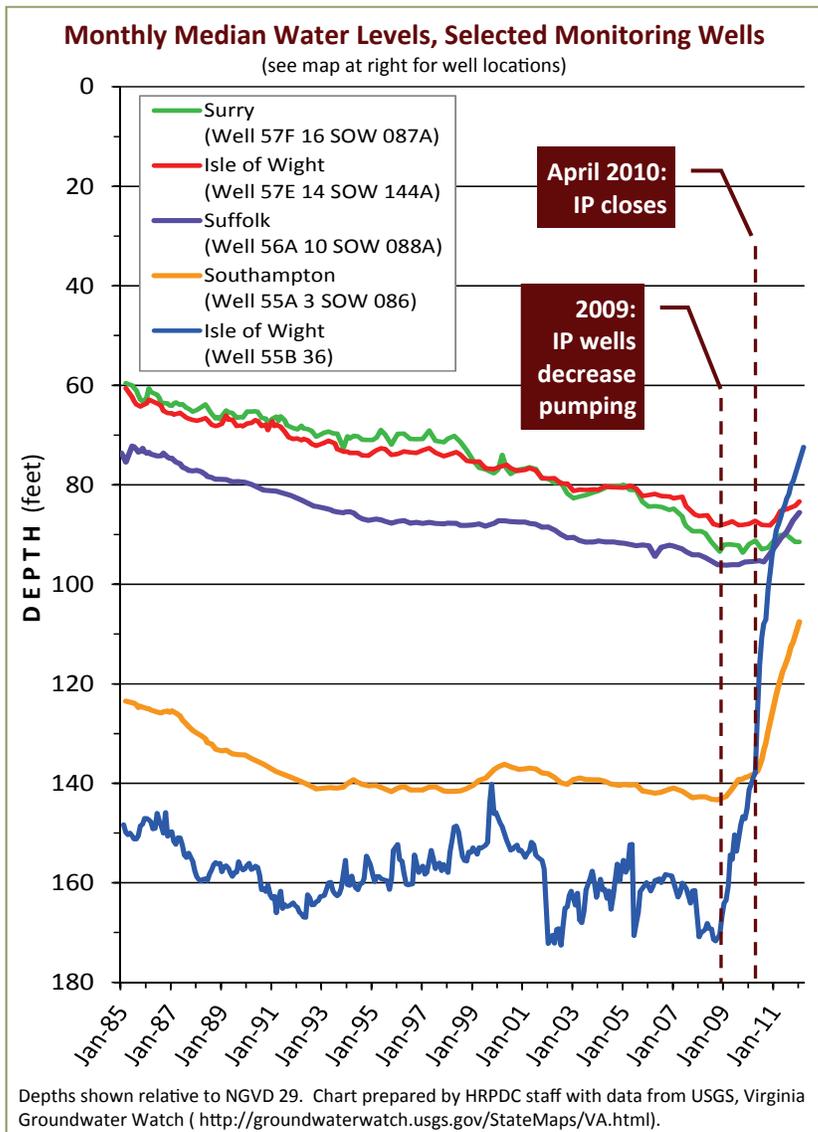
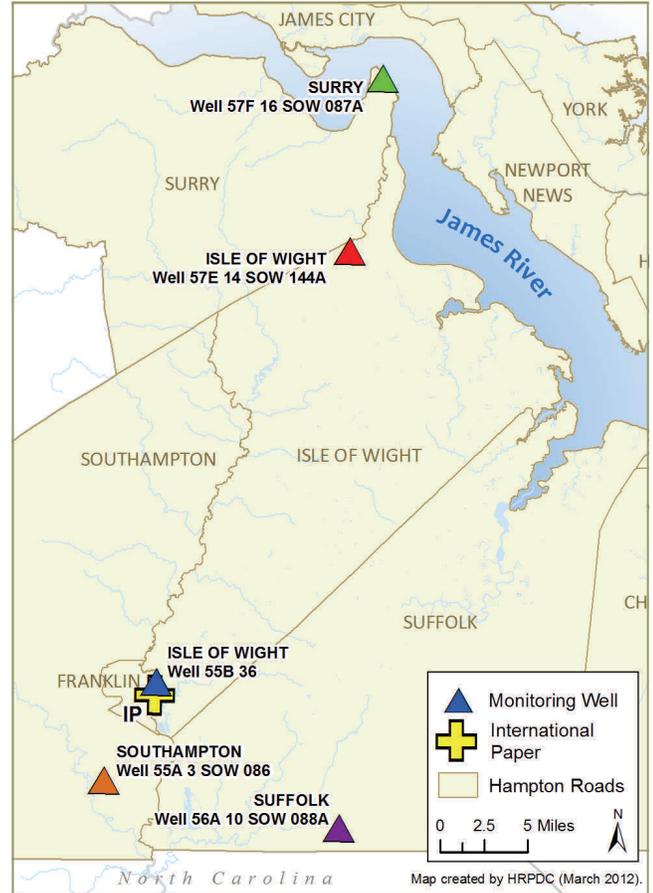


Special Report: Groundwater Levels Recover as International Paper Negotiates Permit

By Whitney Katchmark, Principal Water Resources Engineer



The Coastal Plain aquifer system, which is an important drinking water source in Hampton Roads, has experienced significant changes since paper production ceased at the International Paper (IP) plant in Franklin, Virginia in April 2010. Previously, IP's operations required groundwater withdrawals averaging more than 30 million gallons per day (mgd), which is about the same amount of water used by the City of Virginia Beach. IP's withdrawals lowered water levels in wells in Hampton Roads. Since IP's closure, water levels have risen across the region. The chart below shows water levels recorded at five monitoring wells from 1985 to 2012. For several decades, water levels slowly dropped. Since 2009, water levels at these wells have rebounded 4 feet to as much as 91 feet.



IP continues to hold the largest groundwater withdrawal permit in the region, allowing the facility to pump up to 37 mgd. In 2009, this was equivalent to 22% of all permitted withdrawals in the Virginia Coastal Plain, the portion of Virginia from I-95 to the coast. Prior to announcing closure of the Franklin plant, IP applied with the Department of Environmental Quality (DEQ) to renew its permit that was to expire at the end of 2009. IP requested that the permit be continued until the company could determine the future use of the site. Since the plant's closure, IP has been assessing alternatives. During the summer of 2011, the media reported on the use of Governor's Opportunity Fund monies to reopen up to three production lines to make tissue and fluff pulp, products which require less water to manufacture. IP and DEQ are currently negotiating the permit renewal, and public notice of the draft permit is anticipated in spring 2012.