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## ISIS: CHANGING THE FACE OF WARFARE AND STATE-BUILDING

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When one thinks of traditional weapons of war, it is not common that dams or rivers are the first to come to our mind. The idea of water being a weapon of war might at first seem absurd, as it is not a weapon in the traditional sense. However, water can and has been used successfully as a weapon of war, as will be discussed in this report detailing the strategy employed by ISIS in its quest for a Sunni-Islamic State in the Middle East.

ISIS, known by many names (Islamic State, ISIL, Da'esh, Islamic State Organization), is a Salafi-militant group operating within their self-created "caliphate" which exists in the states of Iraq and Syria. They began to make a serious bid for power in the summer of 2014 and successfully utilized water as a weapon with

which to leverage themselves militarily and as a method of social outreach to gain support in two countries whose water infrastructures have been heavily damaged by years of conflict. This strategy has been, in the writer's opinion, the key to their success. They have utilized one of the region's most precious resources in a multi-faceted strategy to build a state that will endure in a region divided by sectarian and ethnic conflicts.

### **Water as a Weapon of War**

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unbelievable power to its holder. ISIS took advantage of the fact that Iraq's infrastructure was not rebuilt following the 2003 U.S. invasion, making any further damage to water infrastructure difficult to repair. They also correctly recognized a similar situation in Syria, where after three years of civil war, the water infrastructure in many cities was crumbling or already unusable. As Loretta Napoleoni says in her new book *The Islamist Phoenix: The Islamic State and the Redrawing of the Middle East*<sup>1</sup>, "ISIS sensed, before most others had, that joint foreign intervention of the sort that occurred in Libya and Iraq would not be possible in Syria." It was taking this into account that ISIS began its Anbar Offensive, starting in Syria and working its way down the Euphrates River, into Iraq.

The first use of water as a weapon perpetrated by ISIS was at the Nuaymiyah Dam<sup>2</sup> near Fallujah. Militants took the dam from Iraqi forces and diverted large amounts of water by closing the dam's floodgates. This uprooted the armed forces located upstream of their location, forcing them and civilians out of the city of Fallujah. There was such intense flooding upstream that around 60,000 civilians<sup>3</sup> lost their livelihoods, forced to abandon their homes, crops, and animals. Additionally, by diverting water from the dam, the Shi'a population to the south was deprived of their water supply. Additionally, parliamentary elections that were taking place at the time were interrupted, with only one-third of polling stations in the Anbar Province able to open due to the flooding.

ISIS militants have also continually

targeted the Mosul Dam<sup>4</sup>, the largest dam in Iraq. The dam is an incredibly unstable structure, having been built upon deposits of gypsum<sup>5</sup>, anhydrite, marl and limestone, which are all water-soluble and since the dam's construction have been slowly deteriorating as a result of seepage. Controlling this dam would be a major victory for ISIS as its destruction would put Mosul under water and send a wave as high as twenty meters all the way to Baghdad<sup>6</sup>, destroying towns and villages along the way. ISIS' inability to properly maintain the dam<sup>7</sup> could pose an additional security threat. ISIS was only able to control the dam for a few weeks in August before Coalition airstrikes helped the Peshmerga retake the dam, and has been working to retake it ever since.

Thus far, ISIS has been unable to surpass Baghdad to make its way into the Shi'a south. To win Baghdad is part of their goal to restore the Baghdad Caliphate as it was before it was destroyed by the Mongols. If ISIS were to take Baghdad, their promulgation of sectarianism would naturally lead them to attempt to cleanse the south<sup>8</sup> of its Shi'a population, beginning by depriving them of their water resources. In order to achieve this, ISIS militants have feverishly worked to take the Haditha Dam, the second largest dam in Iraq, seen as the key to cutting off all water flow to the south. It is within the same context that speculation has arisen that ISIS will eventually try to take the Ramadi Dam, located upstream of Fallujah and downstream of the Haditha Dam. This dam provides water specifically to the holy Shi'a city of Kerbela.

In the Diyala Province, ISIS con-

trolled the Adhaim Dam until November 2014 when it was recaptured by Iraqi and Shi'a forces. This dam is important to the province because it regulates the most important tributary originating in Iraq. It is also strategically important as the mountains where the river originates are a natural border with the Kurdistan Region, bringing ISIS closer to Kurdish territory<sup>9</sup>. Kurdish forces have also been battling ISIS for control of the Hemrin Dam and protecting the Samarra Dam downstream of the Adhaim Dam.

Throughout the course of the Anbar Offense, upwards of 56 bridges<sup>10</sup> have been destroyed in the Diyala, Anbar, Salahaddin and Nineveh provinces. The bridges have either been purposefully destroyed by ISIS or indirectly destroyed during clashes between the Iraqi Army and ISIS. The bridges were destroyed in order to prevent the Iraqi Army from crossing rivers that would bring them closer to ISIS positions, specifically on the road to Mosul. According to the Iraqi Minister of Housing and Reconstruction, ISIS has caused more than \$6 million in damage to Iraq's infrastructure.

In Syria, ISIS controls the Tishrin and Taqba Dams<sup>11</sup>, both upstream of Raqqa and Deir-ez-Zor. These dams are important, but for different reasons than those in Iraq. They are not seen as potential weapons in the same way as Iraqi dams. Instead, their provision of water and electricity to the surrounding area is what makes them important. By controlling the dams, ISIS has the power to bend the will of the cities relying upon them for water and power.

The dams controlled by ISIS are important to another tactic that they often employ: utilizing their control over water resources to alter the supply available to surrounding towns and villages. This includes cutting off water and electricity and poisoning the water supply. This has been an effective method of persuasion for ISIS in their advance. These water cut-offs have severely damaged Iraq and Syria's agricultural resources, leaving people with little choice but to comply with ISIS' demands. In addition to controlling the water resources that dictate Iraq's food production, the land that ISIS has claimed for its caliphate is a large part of five of Iraq's most fertile provinces which produce approximately 40% of Iraq's wheat<sup>12</sup>, the country's staple crop, giving ISIS control of a substantial amount of Iraq's *virtual water*<sup>13</sup>. This means that ISIS controls important parts of Iraq and Syria's agricultural production. For example, they have seized all nine grain silos<sup>14</sup> in the Nineveh Province and seven other silos in other provinces. In addition to the water cut-offs, there have been several instances where ISIS poisoned the main water supplies of towns and villages. For instance, in the northern district of Balad, south of Tikrit in Iraq, ISIS reportedly poisoned the water supply with crude oil<sup>15</sup>, rendering it undrinkable.

It is with these methods that ISIS has successfully transformed the face of warfare in arid regions. The threat of flooding, water cut-offs, and water poisoning helps them to weaken and seize control of different areas which they then add to their growing 'caliphate'. The use of such a precious

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resource as a weapon gives them great leverage over their opponents. If ISIS were to control the Tigris and Euphrates Rivers as it hopes to, they would control Baghdad<sup>16</sup>. There are many who do not wish to see any more water infrastructure destroyed, crops and homes flooded, or friends and family poisoned in the fight against ISIS. It is with this power that ISIS is able to force towns, villages, and opposition forces into submission.

Regionally, ISIS has taken up the yoke as the defender of the Sunni World in order to stop the take-over of Shi'a regimes. When Nouri al-Maliki was elected president, a new belt formed across the Middle East of Shi'a dominated governments—from Iran to Syria. ISIS's goal is to counter this new threat and seize an area large enough to create a purely Sunni-Islamic state. By taking up this fight in the name of the Sunni population, they have gained a great number of followers from a population with few options. They have shown their great dedication to the promulgation of sectarian conflict through their acts of spectacular violence and more specifically

with their desire to cut off all water resources to the Shi'a south of Iraq. ISIS has achieved great recognition from the international community, not just for the violence of their actions, but for the success they have achieved. The reliance upon water as a weapon of war to this extent is rare and the already scarce water resources of the region force the international community to recognize ISIS and its efficiency. This recognition increases the impact that ISIS has not only in the territory within which it is acting, but on a global scale. Seemingly overnight, ISIS became a household name, terrifying many with the rapidity of its advance. It is with these tactics that ISIS was able to quickly take over large swaths of land while simultaneously making a name for itself.

### Who Controls the Dams in Iraq and Syria?

\* Indicates that ISIS is trying to take this dam from Iraqi/Peshmerga forces  
 \*\* There have been coalition airstrikes around this dam to help the Iraqi Armed Forces to repel ISIS as they try to take the dam.

ISIS
<ul style="list-style-type: none"> <li>• Nuaimiyah (Fallujah)</li> <li>• Tishrin Dam (Syria)</li> <li>• Taqba Dam (Syria)</li> <li>• Ba'ath Dam (Syria)</li> </ul>

Peshmerga/Iraqi Army/Shi'a Militias
<ul style="list-style-type: none"> <li>• Haditha**</li> <li>• Ramadi*</li> <li>• Samarra*</li> <li>• Hemrin</li> <li>• Adhaim*</li> <li>• Mosul*</li> <li>• Dibis</li> <li>• Dukan</li> <li>• Darbandikhan</li> </ul>

## Water as a Method of Social Outreach

The use of water as a weapon has been the key hard power approach for ISIS in its land-grab. Conversely, they are implementing a soft power approach to water and state-building by implementing a well-planned social outreach program and governance structure which includes a cabinet of ministers, Shari'a courts, and a morality police<sup>17</sup>. This system is meant to build their credibility and legitimize their brutal tactics, demonstrating that they have not only power enough to win battles, but the intellect and strategy it takes to govern a state.

This governance structure is led by the "*khalifa*", Abu Bakr al-Baghdadi, who has appointed various advisors, ministers, and military commanders to administer to his caliphate in a carefully structured governance system. Under Baghdadi, there are two deputies, each of whom is responsible for either Iraq or Syria. Baghdadi also has a cabinet of ministers in charge of the treasury, transport, security, prisoners, war, and foreign fighters as well as an independent judiciary<sup>18</sup>. As a part of this governance system, ISIS has worked hard to construct strong institutions and infrastructure within its new territory, implementing a sophisticated social outreach program. This program is intensive in its scope, working to win the hearts and minds of its new citizens with the provision of healthcare, education, and policing services, albeit only to the extent acceptable by ISIS. For example, the religious schools established by ISIS have many restrictions in terms of curriculum. Examples of social out-

reach<sup>19</sup> include building a new souk in Raqqa, installing new power lines, fixing potholes, offering transportation to its citizens, constructing new hospitals, and opening a post office. One of the branches of this social outreach program is in charge of providing stable water and electricity to the residents of the "Islamic State". Raqqa, the capital of the so-called caliphate, was the first city in which this program was implemented and where it has become the most entrenched<sup>20</sup>.

Previous to ISIS militants taking up residence in the city, residents reportedly had only one hour of electricity per day and water was not easy to come by. Once ISIS established themselves in the city, they began to implement their social outreach plan. This included digging wells for local tribes<sup>21</sup> at their own expense in order to show them that they were there to care for them. They also began running the Tishrin and Taqba dams at top capacity<sup>22</sup> and draining Lake Assad of its water in order to provide water and electricity for their new capital city of Raqqa. The use of these dams at this capacity without proper maintenance will eventually render them useless unless they are properly maintained, something that ISIS is incapable of doing. While it has been brought to ISIS's attention that Lake Assad's water levels are rapidly dropping, ISIS has pointed the finger at the Turkish government for the lack of water, blaming the Southeastern Anatolian Dam Project (GAP). This Project has long been a topic of controversy as the Ataturk Dam, one of the project's largest dams, has caused an enormous drop in the Euphrates River's water flow into Syria and Iraq

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and subsequent drought-like conditions in both countries. In an effort to reverse the water loss from Lake Assad, ISIS has been rationing electricity<sup>23</sup> from the Taqba Dam by cutting off electricity to Aleppo for 16 to 20 hours a day

This method of social outreach initially brought them grassroots support in a Raqqa, long-neglected by its government in the midst of a brutal war. ISIS was able to find success due to the fact that they had something to offer in a region left to fend for itself. While this brought them initial success in Raqqa, their governance in Raqqa and other cities has since taken a turn for the worse. Raqqa has returned to its original state, with scarce water resources and electricity<sup>24</sup> available for just a few hours a day. Mosul is also in the midst of a severe water shortage, its water supply contaminated<sup>25</sup> due to the neglect of water treatment stations. With no way to access fresh water, residents have taken to digging their own wells, putting themselves at risk of illness in order to survive. The number of patients admitted to hospitals as a result of water poisoning continues to increase and there has been no clear plan presented by ISIS or another party to counter this problem.

The one aspect in which they have been successful with their social outreach is their use of the virtual water resources they control to provide for the population of their caliphate. ISIS's ability to provide food to people who have largely been forgotten by their respective governments has proven to be a great way to gain support and legitimacy. Additionally,

they are selling the resources they have stolen at very cheap prices to the citizens of their Caliphate<sup>26</sup>.

ISIS is not the first militant group to provide social services to the people within its territory. However, ISIS being different from most militant groups in its quest to form its own state, it is important for them to provide these services. If they are unable to do so, this will bring their legitimacy into question, making it very difficult to consolidate their state. Additionally, the more that ISIS embeds itself in the civilian population, the more difficult it will be for opposition and coalition members to differentiate between citizens and militants, specifically with coalition airstrikes. This may make it difficult to avoid civilian casualties<sup>27</sup>, limiting the coalition's ability to achieve its military and policy goals. It may also lead to a situation similar to what we experienced when American troops withdrew from Iraq. When U.S. troops withdrew, the Iraqi state failed to provide the necessary services to its people, leaving them searching for anyone willing to provide for them, one of the major reasons the Iraqi insurgency was able to grow. If ISIS is eliminated, a similar power vacuum will occur, potentially opening the space for another group to take its place and continuing the cycle of violence<sup>28</sup>.

### What Can We Expect?

As ISIS continues to utilize the infrastructure of Syria and Iraq as a weapon, they are knowingly sending the region into greater peril. There are already severe humanitarian crises in both Syria and Iraq and the

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destruction of important infrastructure, as if it is nothing more than a grenade from their arsenal, will only exacerbate these crises. ISIS' goal is to establish its legitimacy and consolidate its hold on the land it has while continuing to expand its territory. In order to maintain what legitimacy it has established, ISIS should be able to provide the services of a state, as it has promised to do. Being unable to provide non-essential services such as transport might have little effect on their ability to establish themselves. However, if ISIS is unable to provide water to those living within its territory, that would be the nail on the coffin in their efforts for a state. While their utilization of water has proven effective in their land grab, the current situation within the so-called "Islamic State" is unsustainable and if it does not improve, will end in its demise.

In the second issue<sup>29</sup> of its publication, *Dabiq*, ISIS gives its readers a choice: "It's either the Islamic State or the flood". This threat is a reference to the story of Noah who was saved from the giant flood because he was a

true believer, while the nonbelievers, who refused to heed the warnings of a man, perished. Meant as a reference to the Qur'an, the images used in the issue also offer a visual of what it might be like to find oneself on the receiving end of one of ISIS's artificial floods.

In her new book<sup>30</sup>, Loretta Napoleoni appropriately calls ISIS the "Islamist Phoenix". Taking into account the rise of ISIS, from the ashes of Iraq and Syria to become one of, if not the, most feared terrorist organizations in the world, Ms. Napoleoni is quite right in her decision to equate ISIS with a bird that is repeatedly reborn from the ashes of its predecessor. ISIS realized that controlling water allows them to control not only agriculture and electricity, but the economy and important infrastructure, such as sanitation. Their recognition of the importance water plays in the region has provided them the military power necessary to establish themselves as a contender in the region, rising from a previous unknown to a household name in a matter of days.

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ENDNOTES

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- 12 <http://www.businessinsider.com/isis-has-two-major-weapons-in-iraq-2014-8>
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