The Pervasiveness of Political Polarisation in Thailand's Water Policy Gridlock

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Abstract

The causes behind the significant shortcomings of Thailand's water governance have been the question of many scholars, often prescribing these failures to the fragmentation of government agencies. It has also often been argued that the panacea to these woes would be the ratification of a Water Resources Act that has been in the works for over a decade, as it would provide the legal and monetary support for relevant governing bodies. The more pertinent question, perhaps, is why it has taken several decades to ratify a Bill that is crucial for effective and efficient water governance, especially when many Thai livelihoods depend on it.

I argue that the pervasiveness of political polarisation in Thai society, which bleeds into the legislative process, is the core reason for why the ratification of the Water Resources Act has taken over a decade. Political polarisation manifests itself in three main ways. First, frequent political ruptures stemming from clashes between the two poles often results in legislative interruption, requiring the legislative process to restart. Second, each pole seeks to infuse their ideology into the governance of water resources, especially in defining *who owns water* and *who governs water*. This requires time, which is not afforded when clashes and ruptures occurs every few years. Finally, with each political rupture, the rift between the two poles widens, reducing the likelihood for compromise in legislative deliberation. The ratification of the Act in 2018 by the military government, therefore, comes as no surprise, given unlimited time in the policymaking environment and the lack of opposition in parliament.

Finally, I seek to discuss whether the Act answers the woes of water governance that many scholars believe it would, arguing that it has the potential to do so but reaching this potential is not without substantial challenges. I also briefly address the preparedness of relevant agencies under this Act against climate change risks, arguing that these agencies will need to be more innovative and thorough in its mitigation and adaptation strategies.

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Finally, I would like to thank my loved ones for being my rock during the difficult times along my thesis journey.

Table of	Contents
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Introduction	3
Chapter 1: 'Water Governance' within Thailand's Context	7
Defining 'Water Governance'	7
Historical Impact of Poor Governance	9
1. Prominent Floods	. 10
2. Recent Droughts	. 13
3. Incomplete Infrastructure	. 15
Chapter 2: Diagnosing the Problem	. 18
Horizontal Fragmentation	. 18
Vertical Fragmentation	. 20
Too Many Fingers, Too Many Pies	.24
Chapter 3: The Pervasiveness of Political Polarisation in Drafting Procedures	.25
Laying the Political Groundwork	.26
An Overview of Draft Water Resources Acts	. 29
The Intrinsic Element of Political Polarisation in Legislative Failures	.31
1. Legislative Interruption	. 34
2. Ideological Intervention	. 39
3. No Opportunity for Compromise	. 54
Chapter 4: Policy Implications: Water Resources Act B.E.2561 and Beyond	. 57
The Water Resources Act B.E.2561	. 57
1. Organisational Reforms	. 58
2. Property Rights	. 62
The Water Resources Act: The Panacea for All Governance Woes?	. 63
1. Great Strides Towards Addressing Vertical and Horizontal Fragmentation	.63
2. Implementation Dilemmas: Challenges to Organisational Reforms, Sensitive Issues, and Implementation Delays due to COVID-19	.65
Preparedness for the Impact of Climate Change	
1. Existing Tools for Climate Change Mitigation and Natural Disaster Amelioration	
2. Are these measures enough?	
Concluding Remarks	
Policy Implications	
Appendix	
References	

Introduction

In 2018, the world was confronted with the closing reality of "Day Zero" as the four million residents of Cape Town, South Africa struggled with the impending depletion of their water supply.¹ Cape Town is not alone. The reality of "Day Zero", where a city's taps dry out and people are allocated a daily quota of water, closes in on some of the most developed and populated cities in the world. Estimates show that over "52% of the world's population or 9.7 billion people will live in water-stressed regions by 2050."² From our global food supply chain to day-to-day practices in the household, it is undeniable that all aspects of modern life depend crucially on water. We no longer simply rely on water to sustain life, but also to support our way of life. Thailand, like many other countries, is facing the impending reality of our very own "Day Zero" in the upcoming decades. A critical water crisis looms over Bangkok, the country's most populated city as prolonged droughts and worsening salinity of its biggest river, the Chao Phraya River, progressively decreases the limited supply of clean water. As an agriculturally dependent economy, employing over 30% of the population, and one of the world's largest rice exporter, the availability of water underpins the survival of the nation and its people.³

Yet, Thailand's governance of such an important natural resource has been rather dismal. The wasteful use of water, lethargic response to crises, and failure to complete critical infrastructure projects has led to a situation where water is now increasingly considered a scarce resource. Naturally, water resources, its security, and its governance is a multinational issue, where one country's governance upstream can have adverse or favourable consequences

¹ Willi Sarni, "The Myth Of Day Zero: What We Got Wrong With Water", Eco-Business, 2020,

https://www.eco-business.com/opinion/the-myth-of-day-zero-what-we-got-wrong-with-water/.

² "Water Stress To Affect 52% Of World'S Population By 2050", Water Footprint Network, 2014,

https://waterfootprint.org/en/about-us/news/news/water-stress-affect-52-worlds-population-

 $^{2050/\#:\}sim:text=Some\%2052\%20percent\%20of\%20the, by\%202050\%2C\%20MIT\%20researchers\%20say. \&text=affect\%20water\%20stress.-,Some\%2052\%20percent\%20of\%20the\%20world's\%20projected\%209.7\%20billion\%20people, by\%202050\%2C\%20MIT\%20researchers\%20say.$

³ World Bank Development Indicator, Thailand

for those countries living downstream. Thailand is one such downstream country that shares these water resources with its neighbouring countries and is somewhat dependent on the actions of its upstream regional power, China. That said, the scope of this thesis is limited to governance at the national level, as I seek to unpack the socio-political circumstances around national policymaking on water resources rather than to delve into the international politics of water resources sharing at the regional level.

The failures of Thailand's water governance have been heavily researched over the past several decades. The root cause of the problem in existing literature can largely be divided into two categories: horizontal fragmentation and vertical fragmentation. Horizontal fragmentation refers to the splintering of power and responsibilities which can be illustrated in the sheer number of government agencies overseeing diffused areas of management. Undoubtedly, these responsibilities overlap. The lack of inter-agency communication also results in inefficient and incomplete governance of national water resources.⁴ Vertical fragmentation refers to two things: first, the absence of an overarching governing body to integrate water governance at all levels and, second, the incomplete devolution of power that was ignited in 1999 following the Decentralisation Act. Both factors have resulted in *ad hoc* water governance projects without clear direction or strategy with natural disasters being handled reactively rather than proactively.⁵ Ultimately, the argument in the literature goes, the missing piece of the governance puzzle lies with the creation of a Water Resources Act, which would provide the required legal authority over Ministries and geographical jurisdictions as well as the budget

⁵ Danny Marks and Louis Lebel, "Disaster governance and the scalar politics of incomplete decentralization: Fragmented and contested responses to the 2011 floods in Central Thailand," *Habitat International* 52 (2016).;

⁴ Duenden. Nikomborirak and K. Ruengthip, "History of Water Resource and Flood Management in Thailand," (2013), TDRI Policy Brief.;

Francesca Franzetti, Alessandro Pezzoli, and Marco Bagliani, "Rethinking Water Resources Management Under a Climate Change Perspective: From National to Local Level. The Case of Thailand," in *Renewing Local Planning to Face Climate Change in the Tropics*, ed. Maurizio Tiepolo, Alessandro Pezzoli, and Vieri Tarchiani (Cham: Springer International Publishing, 2017).

Andreas Neef, "Lost in translation : The participatory imperative and local water governance in north Thailand and southwest Germany," *Water Alternatives* 1, no. 1 (2008).;

allocations to properly integrate and provide a unified direction to water resources management within the country.

These explanations are insufficient. While it may be true that fragmentation of governance has resulted in the poor management of Thailand's water resources but to remedy such fragmentations, it is crucial to examine the socio-political conditions upon which these fragmentations emerge. With a plethora of work written, on the one hand, on political polarization in Thailand and, on the other, fragmented governance of water resources in Thailand, this paper bridges this gap between the two by analysing the impact of pervasive political polarisation on the shortcomings of water governance.

The paper's initial hypothesis is that the intensity and pervasiveness of political polarisation in Thailand has resulted in a chronological discontinuity in policymaking between different administrations. The idea here is that political polarisation creates an environment where each administration does not want to be associated with the previous administration and – with governance of water resources being fundamental to Thai livelihoods – each administration wants to be credited with the achievement of an important milestone in water governance: the ratification of the Water Resources Act under their administration. After thorough examination of socio-political contexts surrounding the negotiation and deliberation process and the content of each revision of the draft Bill, I've found that political polarisation is not only a strong undercurrent in the failure to ratify the Act, but it also manifests itself in a more nuanced way. While in some cases, it is as straightforward as disassociating with the previous government, in others, it is often about *who owns water and who governs it.* This is because at the core of political polarisation in Thailand lies the question of whether the country should be run by elites or by the masses. As such, these ideas of centralised and decentralised governance bleeds into the creation process of this Act.

The challenge that political polarisation poses to the ratification of the Water Resources Act, deemed crucial for proper management of water resources, is further compounded by the delicacy of the issue. Water is not only a fundamental aspect of life, but it is also a crucial resource for the making of Thai livelihoods. As such, creating a document that legislates the matters of property rights and determines the centre of power creates many winners and losers in which the entire country are stakeholders. Therefore, the sensitivity of the issue requires a significant amount of time for deliberation and compromise – both of which cannot occur within a highly polarised society like Thailand.

The successful ratification of the Water Resources Act B.E.2561 in 2018 is, therefore, largely attributed to the relative stability in the policymaking arena in which there is also little to no opposition. The four years under the junta from 2014 until the ratification in 2018, while undemocratic, enabled the deliberation of a Water Resources Act and, without opposition, allowed its ratification.

In the wake of this milestone, this thesis will also be assessing the ability of the Water Resources Act B.E. 2561 to solve previous governance issues and its preparedness to handle challenges in the future. I argue that the Act has significant potential to alleviate existing governance issues, but also faces significant challenges, especially in the face of COVID, and that#he benefits will not be felt for several years. I also broadly discuss whether the Resources Act is prepared to handle the challenges and risks of climate change. To do so, I accumulate the measures outlined in the Act and supplementary plans in mitigating climate change risks, such as the increasing severity of El Nino and rising salinity of ground and freshwater. I make a preliminary conclusion that while these measures are sufficient to mitigate the worst of its impacts, for now, the National Water Resources Commission will need to be more rigorous in its management of water resources, proactive in mitigating climate change risks, and creative in handling crises. In this thesis, I use qualitative methods of research by conducting a series of in-depth interviews alongside my analysis of various Water Resources Bills, government reports, and secondary sources. My interviewees consist of a Distinguished Research Fellow at the Thailand Development Research Institute who is a specialist in agricultural policy, an officer in the Legal Affairs team at the Department of Water Resources, the Secretary-General of the Cabinet, and the Secretary-General of the Office of National Water Resources to form an assessment on the adequacy of the Resources Act.

The organisation of this thesis is as follows. Chapter 1 entails historical cases of water governance failure in the past several decades, both regarding disaster management and infrastructure development. Chapter 2 provides a literature review on the causes of water governance failures, largely attributing the failure to poor organisational structure and the absence of an overarching legal framework. Chapter 3 delves into the relationship between political polarisation and the policymaking and legislative process of the Water Resources Act. Chapter 4 evaluates the effectiveness of the Water Resources Act in addressing governance issues as outlined in Chapter 1 and 2.

Chapter 1: 'Water Governance' within Thailand's Context

Defining 'Water Governance'

The parameters of 'water governance' so far have been broadly and vaguely defined. In general, the term has been used towards designing "particular institutional, organizational, and financial arrangements for making water decisions and regulating water."⁶ For instance, the Global Water Partnership (GWP) considers water governance to be the "range of political, social, economic and administrative systems that are in place to develop and manage water

⁶ Margreet Zwarteveen et al., "Engaging with the politics of water governance: Engaging in water governance discussions," *Wiley Interdisciplinary Reviews: Water* (2017): 2.

resources, and the delivery of water services, at different levels of society."⁷ These definitions - and its uses in the past - have had a normative and institutional focus, relaying the importance of 'good governance' principles. These principles pertain to participatory and consensusoriented decision-making, involving decentralisation of power from the central government towards local communities, while ensuring that corruption is minimised and that all stakeholders' needs, interests, and rights are considered in the governance over shared resources, particularly society's most vulnerable members.⁸ These prescriptions are considered to be prerequisites to effective water governance and are amalgamated in the 'Integrated Water Resources Management' (IWRM) framework.⁹ IWRM draws significantly from Elinor Ostrom's work which sets out to institutionally design 'common pool resource systems,' in a way that reduces collective action challenges.¹⁰ According to studies, water resources are "best managed" by river basin committees, which are constituted by and represent the interests of water users, embodying "nested enterprises," in which "smaller-scale resource regimes are linked in multiple layers to form larger entities of resource governance".¹¹ Within these committees, channels of collective decision-making and conflict resolution mechanisms must be established, and with clearly defined boundaries; the governance design therefore revolves around concepts of decentralisation and self-organisation.

Over the past decade, a tangential dimension of this research agenda has been emerging, engaging with the human factor behind water governance and the sociological and political processes of governance itself. The literature has seen an increasing linkage between the governance of water resources and the deep-rooted socio-political choices that are involved.

⁷ Peter Rogers and Alan Hall, "Effective Water Governance," (01/01 2003): 16.

⁸ J. J. Hukka et al., "Water, Policy and Governance," *Environment and History* 16, no. 2 (2010), http://www.jstor.org/stable/20723778.

⁹ Ibid.

¹⁰ Duenden Nikomborirak, Climate Change and Institutional Challenges for Developing Countries: The Case of Water Resource Management in Thailand (2016).

¹¹ Lundqvist, Lennart. 2018. "'Nested enterprises'? Spatial dimensions of ecological governance." 10.7765/9781526137678.00006.

Such governance relies on decisions surrounding flows of water, norms upon which laws should be based, and upon whom the authority of making such decisions in the future should be placed. The deeply political environment upon which these decisions are made are being uncovered, analysed, and explained against its socio-economic and cultural contexts: these political, social, and cultural contexts within which policy is created and implemented inform and shape how water is, in reality, governed.¹² As water is a fundamental need for human survival, its governance entails a much broader conversation of ethics, histories, and "political-economic systems that give rise to, sustain, and reinforce" decision-making patterns.¹³ As such, Wilson et al. (2019) refers to water governance as the "processes through which institutions, actors, and societies broadly decide on how water is to be used, by whom, and under what circumstances."¹⁴

Although the normative and prescriptive dimension of Thailand's governance shortcomings is well established, questions of the broader political and cultural contexts upon which these shortcomings emerge and repeated failures to remedy such shortcomings have largely remained untouched. It is against this background that this paper seeks to assess the inherent and fundamental socio-political drivers behind Thailand's poor water governance over the past several decades.

Historical Impact of Poor Governance

Thailand, like many of its neighbouring countries, suffer from the issues of "too much water" and "too little water". On the one hand, the problem of "too much water" arises in instances of floods in which its mismanagement often comes from the failure to develop

¹² Hukka et al., "Water, Policy and Governance."

¹³ Nicole J. Wilson et al., "Re-Theorizing Politics in Water Governance," Water 11, no. 7 (2019),

https://www.mdpi.com/2073-4441/11/7/1470.

¹⁴ Wilson et al., "Re-Theorizing Politics in Water Governance," 1470.

floodplains that corresponds with the flood risk at hand.¹⁵ On the other, the problem of "too little water" occurs with too little rainfall alongside increased urbanisation and, consequently, the increased water demand. Droughts and increased dependence on water – whether through increased reliance on agriculture or further urbanisation – exacerbate the problem of "too little water"

The issues of "too much water" and "too little water" can be broken down into what can be controlled and what cannot be controlled. Nature can be kind or it can be harsh – neither of which can be controlled. To illustrate, when heavy rain falls, it may fall in areas with higher catchment rates such as in dams, or heavy rains could cause floods. However, what can be controlled are the institutions supporting the governance of such water resources, the preparedness of the governance and disaster personnel, and the mechanisms that are implemented to reduce the severity of such unpredictability.

At least in modern history, Thailand has been riddled with water catastrophes, exacerbated by the failure to prepare and manage resources in a way that minimises risks and damages. While some are rooted in human hubris, such as over-ambitious water management infrastructure projects that have now been left incomplete, many involve the mishandling of floods and droughts despite their frequent occurrences.

1. Prominent Floods

In one of the worst floods Thailand has experienced, the 1995 floods affected 68 out of 77 provinces and costed the government approximately 3.5 billion baht in flood damages.¹⁶ Water levels rose to 2.27 meters above ground in Bangkok alone, adversely impacting 2.6

 ¹⁵ Daniel P. Loucks and Eelco van Beek, "Water Resources Planning And Management: An Overview", in Water Resource Systems Planning And Management (repr., Springer, Cham, 2017), 1-49, https://doi.org/10.1007/978-3-319-44234-1_1.
 ¹⁶ United Nations Department of Humanitarian Affairs. 1995. "Thailand - Floods Information Report No.1 Situation Report". https://reliefweb.int/report/thailand/thailand-floods-information-report-no1.; Bangkok Post, 2011. Splash From the Past. [online]. Available at: ">https://www.bangkokpost.com/photo/262533/splash-from-the-past> [Accessed 15 March 2021].

million people in the city, and claiming 420 Thai lives. The districts most severely affected by the floods in Bangkok were those that surrounded the riverbank: Bang Plad, Bangkok Noi, and Klongsan.¹⁷ With the flood impending, in one of the only royal interventions in water governance matters, King Rama IX worked closely with the Ministry of Finance and the Royal Irrigation Department to accelerate the construction of the Kaeng Sua Ten Dam in order to delay the floods as well as to investigate the possibilities of building dedicated floodway. Due to the nature of property and land rights in Thailand, in previous reigns, some of the land under the property of The Crown is considered to be property of the State and can only be used for the development of public goods. It is on one of these properties that the King had requested a feasibility study for the creation of a specific floodway to reduce the damage of floods, which, according to official documents, was approximately 5,600 rai (approximately 896 hectares). However, upon further investigation, it came to fruition that only 3,000 rai (approximately 480 hectares) were available, which was insufficient for the project to take heed.¹⁸ The reduced availability of land that prevented this project is largely a result of the illegal purchasing of land, which has allowed the land to be converted into residential areas.

Recently, the most prominent crisis of governance that accompanied a flood was in 2011. The 2011 floods inflicted the worst damage seen in recent Thai history: it affected over 13 million people with over 600 deaths and caused over USD 46.5billion in damages and losses.¹⁹ Though water governance has been on the political agenda for some time, the severity of these floods placed water governance back at the forefront of the legislative agenda. These floods were not flash floods but were a relatively slow onset development; nevertheless, it had devastating outcomes. Not only did the floods move gradually, beginning in late July and

¹⁷ Thairath Online. 2011. "Wfeod Acin Succession of Content/210756.

¹⁸ Post Today. 2011. "ÕiÈice aštur |A... + 30 - 2538". https://www.posttoday.com/social/royal/120027.

¹⁹ Nipon Paoponsakorn and Pitsom Meethom, "Impact of the 2011 Floods, and Flood Management in Thailand," *ERIA Discussion Paper Series* (2013).

lasting through December 2011, there were also tell-tale signs of floods. The average rainfall that year had been approximately 35% higher than the 50-year average which has been attributed to the 5 tropical storms over the monsoon season.²⁰

The mismanagement the flood risks prior to the disaster and inefficient implementation of disaster adaptation can be largely attributed to poor communication within the over-saturated web of governmental agencies without a clear mandate. As it became clear that the river basins in the Lower North and Central Plains were over-flowing, the severity of the floods could and should have been addressed swiftly and effectively. Especially after the Central Plains' flooding, it was apparent that the water moved very gradually, at approximately 2-3km per day due to the relative flatness of the land.²¹ There was time for proposals and counter proposals to be made from various factions of the central plains, the perception of time eliminated the sense of urgency attached to crises in decision-making environments, which resulted in a lack of proactiveness when deadlocks occurred. As such, the mishandling of these floods resulted from the failure of each governmental authority to make necessary and adequate decisions to minimize losses and damages.

The amalgamation of poor decisions leading up to these floods had a significant impact in its outcomes: urbanization and industrialization were allowed to occur in flood-prone areas as well as dedicated flood plains. The government's failure to address these shortcomings time and time again allows history to repeat itself.

²⁰ Paoponsakorn and Meethom, "Impact of the 2011 Floods, and Flood Management in Thailand."

²¹ Paoponsakorn and Meethom, "Impact of the 2011 Floods, and Flood Management in Thailand."

2. Recent Droughts

In 2020, Thailand experienced the worst drought in 40 years, putting the Thai economy under further stress following the COVID-19 pandemic. The agriculture sector, which currently employs 11 million people, was expected to be most severely affected.²² According to Bloomberg, sugar output fell by 40% in the 2019-2020 harvest season compared to the previous year, indicating massive losses in both national revenue and damages to livelihoods.²³ Near the river delta, river water levels were so low that sea water entered the river and travelled upstream, affecting drinking water in the region. There are no figures released by state agencies or research organisations as of yet concerning the damages and losses in economic value as a result of this most recent drought, but the figures should be released in late 2021.

There are three key factors behind the severity of the 2020 drought: the cumulative El Nino effect, the low capture of rainfall, and the lack of water in the Lower Mekong Region. First, the weak El Nino phenomenon in late 2018 impacted rainfall in 2019, which was approximately 5-10% below the yearly average.²⁴ The phenomenon also led to increased temperatures in the Southeast Asian region, resulting in a "high evapotranspiration," rate where water in reservoirs and dams evaporated at a higher rate than usual.²⁵ Second, and related to the first, was that even when Thailand did receive rainfall, a large fraction of such waters "fell outside watersheds of reservoirs and dams."²⁶ By the end of 2019 and the beginning of the 2020 drought, the levels of useable waters in reservoirs and dams was at a critical low point –

²² Bangkok Post. 2020. "Thailand Tackles Worst Drought In 40 Years".

https://www.bangkokpost.com/business/1853069/nation-tackles-worst-drought-in-40-years.

 ²³ Thanthong-Knight, Randy. 2020. "Drought-Hit Thai Sugar Sector 'Relieved' By Return Of Rainfall". *Bloomberg Green*.
 https://www.bloomberg.com/news/articles/2020-08-06/drought-hit-thai-sugar-sector-relieved-by-return-of-rainfall.
 ²⁴ Sowcharoensuk, Chaiwat. 2020. "Severe Drought: Agriculture Sector Takes Direct Hit And Spillover effects On

Manufacturing Supply Chains". *Krungsri Research Intelligence*. https://www.krungsri.com/en/research/research/intelligence/RI-Drought.

²⁵ Down To Earth. 2020. "Water Supplies Dry Up As Thailand Reels Under Worst Drought In Decades". Downtoearth. https://www.downtoearth.org.in/news/climate-change/water-supplies-dry-up-as-thailand-reels-under-worst-drought-indecades-69333.

²⁶ Sowcharoensuk, "Severe Drought: Agriculture Sector Takes Direct Hit And Spillover effects On Manufacturing Supply Chains".

at only 29% of storage capacity. ²⁷ Finally, these weather and climate phenomenon compounded an existing issue that has been a point of contention within the Mekong basin for the past several years: there is a severe lack of water flow in the Lower Mekong region as a result of flow restrictions in the upper region. These restrictions were also seen to play a major role in the 2010 and 2016 droughts, which caused approximately 52 billion baht in economic damages.²⁸ The situation of water scarcity in the Lower Mekong region has become more severe, as weather patterns become more extreme and water demand increases. Local communities and protests within countries that rely on water from the Mekong region have demanded greater transparency on upstream activities in China.²⁹

The government sought to remedy these issues, particularly of contamination of drinking water supplies, by releasing approximately 1.65 billion cubic meters of water in two phases from reservoirs up in the North. The aim was to alleviate agricultural hardship ahead of harvest season, but to also flush out sea water from the Chao Phraya River Basin. However, after releasing 65 million cubic meters of water in the first phase, waters in the Chao Phraya River Basin remained salinated – where did the water go? An investigation revealed that farmers in the central plains north of the basin had irrigated all the fresh water that flowed from the reservoirs.³⁰

As shocking as it may seem, Thailand has faced droughts in a rather cyclical manner. In the years leading up to the 2016 droughts, Thailand experienced higher-than-average rainfall, which begs the question of efficacy and effectiveness of existing water storage systems and water demand management. It goes without question that extreme weather conditions, such as

²⁷ Ibid.

²⁸ Satrusayang, Cod. 2020. "Water Levels In Lower Mekong Basin At Historic Lows Despite The Onset Of The Rainy Season". Thai Enquirer. https://www.thaienquirer.com/14589/water-levels-in-lower-mekong-basin-at-historic-lows-despitethe-onset-of-the-rainy-season/.

²⁹ Ibid.

³⁰ Nipon Paopongsakorn (Distinguished Fellow/Acting Program Director Sectoral Economic

Program, Thailand Development Research Institute Foundation), interviewed by the author, March 2021

El Nino or tropical storms, as well as upstream activities that crosses national borders are beyond the Thai government's control. However, the government's approach in the past has been supply management, while neglecting potential quick wins in demand management to reduce the severity of future droughts.³¹

3. Incomplete Infrastructure

In 1997, the Khong-Chi-Mun (KCM) project came into limelight after the Prime Minister declared his full support for its aims to provide water security for Northeastern Thailand, which has been a long-standing issue. The project, which began its development in 1989, sought to connect the Mekong, Chi, and Mun river systems to promote and support agriculture in the Northeast, which would be able to irrigate an increase of 4.9 million rai (approximately 784,000 hectares) and would be able to sustain agriculture – particularly exportable vegetables – during the dry season.³² However, the project was challenged by many academics and NGOs who saw the project as a political grab for power and influence, rather than a project that adequately addressed water security due to its lack of "research, transparency, and participation."³³ As the project continued, local populations who lived in the lower region of the Mun river joined academics and NGOs in their resistance against the project due to the damage the project would incur to the forest and floodplain ecosystem that their livelihoods depended.³⁴ In the mid-1990s, adverse environmental impacts of the project became exposed, which included saline contamination that worsened soil and water quality in the region.³⁵ The project came to a sharp halt as a result of the 1997 financial crisis.

³¹ Ibid.

³² Sneddon, Chris. 2003. "Reconfiguring scale and power: the Khong-Chi-Mun project in northeast Thailand." *Environment and Planning*, 2229-2250.

³³ Molle, François, and Philippe Floch. 2008. "Megaprojects and Social and Environmental Changes: The Case of the Thai "Water Grid." *AMBIO A Journal of the Human Environment*, 199-204

³⁴ Sneddon, "Reconfiguring scale and power: the Khong-Chi-Mun project in northeast Thailand."

³⁵ Suong, Thu. 2016. "Mekong Basin Stirs Up Region: Thai Water Diversion Project Could Have Mega Risks". *Earth Journalism Network*. https://earthjournalism.net/stories/mekong-basin-stirs-up-region-thai-water-diversion-project-could-have-mega-risks.

The project was picked up by the Royal Irrigation Department again in 2015, following severe droughts earlier that year. The KCM project would now include the Loei river, making it the KLCM project, and would irrigate 30.6 million rai (approximately 5 million hectares) of farmland if completed. The project would require an investment of 2.69 trillion baht. Despite mistakes in the past, the feasibility study and planning for the project continued without transparency. There are apprehensions and significant resistance from populations that would be directly impacted by the project, due to concerns about flooding in residential areas from the diversion of water from the Mekong to Loei as well as water shortage concerns from those living near the Mekong.³⁶ It seems that the project has continued without transparency and on an ad hoc basis.

In another infrastructure development project, the Thaksin administration sought to triple irrigated areas in Thailand through the "Water Grid" project in 2003, particularly areas in the Northeast in order to "improve farmers' quality of life."³⁷ The project sought to build 300 new large- and medium-sized reservoirs and 25,000 community reservoirs which would require an estimated 400-million-baht budget. This would allow for 103 million rai (approximately 16.48 million hectares) to be irrigated, from the existing 29.5 million rai (approximately 4.7 million hectares). Despite high ambitions to alleviate poverty and to ameliorate issues of water shortages in the Northeast, these ambitions overshadowed any real discussion on cost-effectiveness and feasibility of the project in the long run. The project also received intensive critiques in 2004 by environmentalists, water experts, and related academics for a wide array of issues, ranging from soil salinity to labour management. Particularly noteworthy was the consultants' conclusion that the project's feasibility depended on tapping into neighbouring countries' shared resources in the Mekong in order to meet the water supply

 ³⁶ Lan, Mai. 2016. "Diverting The Mekong River Into Thailand: The Khong-Loei-Chi-Mun Project - Mekong Eye". *Mekong Eye*. https://www.mekongeye.com/2016/06/07/diverting-the-mekong-river-into-thailand-the-khong-loei-chi-mun-project/.
 ³⁷ Molle and Floch, "Megaprojects and Social and Environmental Changes: The Case of the Thai "Water Grid."

set out by the "Water Grid," requiring bilateral agreements that could result in significant – but unincorporated – costs.³⁸ Due to the sensitivity of the subject, this issue was "not discussed openly and has not been reported in the news."³⁹ Ultimately, with the fall of Thaksin's administration in 2006, these ambitious projects have been put aside and it remains unknown the extent of costs to which these projects had already incurred.

³⁸ *Ibid*

³⁹ *Ibid*, 201

Chapter 2: Diagnosing the Problem

Prescriptively, the existing literature has identified that water governance in Thailand suffers from two key challenges: horizontal and vertical fragmentation. Here, 'horizontal fragmentation' will refer to the splintering of power and responsibilities, and 'vertical fragmentation' will refer to the incomplete process of decentralisation of power and responsibilities among governmental agencies. Additionally, without a government agency that oversaw and integrated governance at national, provincial, and local levels, the incomplete decentralisation meant that there was no direction to the governance of water resources, resulting in fragmented governance at the whims of individuals. Much of the literature that currently exists prescribes governance issues as either one of the two fragmentations or a combination of both.

Horizontal Fragmentation

Governance over Thailand's water resources has been distributed across over 30 agencies and seven ministries, and the legal guidance on such governance is embedded in over 50 laws.⁴⁰ The governance of water therefore suffers from poor cross-agency communication. Unavoidably, these agencies were tasked with overlapping roles and responsibilities, which led to both inter- and intra-agency power conflicts, especially with regards to jurisdiction. Just in the Chao Praya River Basin alone, the government has established eight river basin committees.⁴¹ In addition, the disconnect between these agencies resulting from poor cross-communication meant that there was no unified strategy for the overarching governance of water resources. Franzetti, Pezzoli, and Bagliani have argued that beyond the poor inter-agency communications, these shortcomings also meant that the governing bodies failed to implement

⁴⁰ Andreas Neef, "Lost in translation : The participatory imperative and local water governance in north Thailand and southwest Germany," *Water Alternatives* 1, no. 1 (2008).; D. Nikomborirak and K. Ruengthip, "History of Water Resource and Flood Management in Thailand," (2013), TDRI Policy Brief.

⁴¹ Danny Marks and Louis Lebel, "Disaster governance and the scalar politics of incomplete decentralization: Fragmented and contested responses to the 2011 floods in Central Thailand," *Habitat International* 52 (2016).

policies to an adequate degree, mitigate disaster risks, and effectively distribute resources, both in normal times and in crises.⁴²

In a comparative study between Southwest Germany and North Thailand, Neef outlines the attempt to overcome this fragmentation challenge in the Mae Sa watershed. In this vein, the government requested technical assistance from the Asian Development Bank in 2000-2001 to develop a "unified water management system."⁴³ Key executing agencies included the Office of National Water Resources, which had been established in 1996, and the Royal Irrigation Department, which was the largest operating agency within the agricultural sector. However, this attempted reform was met with significant push back from several prominent NGOs over concerns of increasing costs for farmers and the quality of irrigation services, which resulted in their refusal to attend workshops hosted by the ADB. Without these NGOs present, stakeholder conceptualization and negotiations were severely limited. Additionally, the Royal Irrigation Department was reluctant to commit to the project, due to their existing projects and mandates.⁴⁴

Addressing these issues became unavoidable in the aftermath of the 2011 floods. In another attempt to address inter-agency issues, the government at the time created 8 new national committees and 25 river basin committees, in order to integrate water management based on hydrological borders with the administrative and bureaucratic dimension.⁴⁵ However, these establishments created more issues than it could solve – as these committees are created under the Office of the Prime Minister and the Cabinet, they lack legal authority and budget

⁴² Francesca Franzetti, Alessandro Pezzoli, and Marco Bagliani, "Rethinking Water Resources Management Under a Climate Change Perspective: From National to Local Level. The Case of Thailand," in *Renewing Local Planning to Face Climate Change in the Tropics*, ed. Maurizio Tiepolo, Alessandro Pezzoli, and Vieri Tarchiani (Cham: Springer International Publishing, 2017).

⁴³ Asian Development Bank. 2001. "3260-THA: Capacity Building in the Water Sector." TA Completion Report.

⁴⁴ Neef, "Lost in Translation: The Participatory Imperative and Local Water Governance in North Thailand and Southwest Germany," 95.

⁴⁵ Nipon Paopongsakorn (Distinguished Fellow/Acting Program Director Sectoral Economic

Program, Thailand Development Research Institute Foundation), interviewed by the author, March 2021

control. Furthermore, their directive is tied with the administration, which ended in 2014 following the military coup.

Despite these inefficiencies, attempts towards reforms have been met with significant resistance, as illustrated by ADB's failed efforts. Just from the 2011 floods alone, horizontal splintering of agencies demonstrates a key challenge to water governance in Thailand. The unclear distribution of power, responsibilities, and mandates among governmental bodies at both the central and local levels prevent coherence and efficiency during normal times, and competence and agility during crises. As such, horizontal fragmentation of agencies continues to be a devastating issue within Thailand's water governance.

Vertical Fragmentation

During the turn of the millennium, the Thai government attempted a series of political and bureaucratic reforms in pursuit of a more consolidated democracy that resembled liberal democracies of the West. Following the 1997 Constitutions, also known as the "People's Constitution," in 1999, the Thai government passed the 'Determining Plans and Procedures for Decentralization to Local Organization Act B.E. 2542' which would come to be known as the Decentralization Law. The Law mandates that at least 20% of the central government's revenue must be devolved to local organisations by 2001, and this percentage will increase to 35% of government revenue by 2006.⁴⁶ In particular, Neef notes in his comparative study that there were acute pressures to devolve the decision-making powers and responsibilities of natural resources such as water resources to local administrations and to encourage participation from local communities in the management of natural resources.⁴⁷ Marks and Lebel follow the guidelines of IWRM and lead using Ostrom's works on common resource dilemmas to assert

⁴⁶ Translation of Determining Plans and Procedures for Decentralization to Local Organization Act B.E. 2542 (1999)

⁴⁷ Neef, "Lost in Translation: The Participatory Imperative and Local Water Governance in North Thailand and Southwest Germany,"

that water governance in Thailand should be determined by "decentralisation with coordination," as it is perceived to be the "most effective and equitable form of water governance."⁴⁸ In 2002, in line with the water governance discourse at the time led by those in the Global Water Partnership⁴⁹, Thai policymakers established "Watershed Councils". These Councils were to decentralise power, responsibilities, and duties from the National Water Resource Committee previously established in 1989. These Councils would also oversee the management and maintenance of water resource usage and distribution, dispute resolution, and ensure appropriate levels of public participation in decision-making procedures.⁵⁰

Throughout the political turmoil and re-drafting of constitutions, all governments have included public participatory clauses and policies. Section 77 of the current constitution mandates that

"the State should conduct consultation with stakeholders...and should also disclose the results of the consultation and analysis to the public, and take them into consideration at every stage of the legislative process."⁵¹

Molle and Floch found that, in reality, more often than not, these public participation efforts were not transparent and were generally used as a means to garner legitimacy for new projects. Furthermore, those who engaged in such participation processes were selected rather than randomised, largely ensuring their support.⁵²

Decentralisation reforms faced crippling obstacles in all areas, notwithstanding water management. Issues with decentralisation are at least two-fold: first, agencies at the top of the bureaucratic chain are reluctant to devolve their power and responsibilities to local

⁴⁸ Marks, Danny, and Louis Lebel. 2016. "Disaster governance and the scalar politics of incomplete decentralization: Fragmented and contested responses to the 2011 floods in Central Thailand." Habitat International 57-66.

⁴⁹ See Chapter 1 outlining the definitional and institutional discourse from the Global Water Partnership

⁵⁰ Nikomborirak and Ruenthip, "History of Water Resource and Flood Management in Thailand"

⁵¹ Office of the Council of State, "Unofficial Translation of Constitution of the Kingdom of Thailand."

https://www.constitutionalcourt.or.th/occ en/download/article 20170410173022.pdf

⁵² Molle and Floch, "Megaprojects and Social and Environmental Changes: The Case of the Thai "Water Grid."

communities and, second, when power has been transferred towards local administrations, it has often been captured by local elites for personal gain.⁵³

With respect to the former, Yi and Cui, and Marks and Lebel, for instance, observe that central bureaucrats and line agencies refused to devolve the majority of their power and local administrative organizations were too weak to demand them. The likelihood of success in political reforms that involve significant redistribution of power is particularly low, due to the transaction, bargaining, and enforcement costs.⁵⁴ This is particularly acute in decentralisation reforms that provoke an overhaul of existing decision-making capabilities from the national level to local administrative bodies. Water governance exemplifies this challenge, due to the scarcity and necessity of the resource, whose control wields political and economic power and influence. As such, significant resistance from major line agencies, such as the Royal Irrigation Department, posed challenges to the complete decentralisation of water resource governance. Some sources have cited that those in top governmental agencies also doubt the ability of local communities and organisations to manage water in an efficient and sustainable manner.⁵⁵

With respect to the latter, the Decentralization Law has established the Tambon Administrative Organization (TAO) which operates as a decision-making body at the subdistrict level, which has significant sway over water resource governance. Dufhues, Theesfeld, and Buchenrieder elaborate on the way that TAOs have inadvertently allowed for two types of elite capture to occur. First, existing local elites have been able to increase their power over resources due to their increased governing role and budget, and, second, a space has been

⁵³ Shatkin, Gavin. 2004. "Globalization and Local Leadership: Growth, Power and Politics in Thailand's Eastern Seaboard." *International Journal of Urban and Regional Research*, 11-26; Marks and Lebel, "Disaster governance and the scalar politics of incomplete decentralization: Fragmented and contested responses to the 2011 floods in Central Thailand." ⁵⁴ Yi, Hongtao and Can Cui. 2018. "Coping with functional collective action dilemma: functional fragmentation and administrative integration." *Public Management Review*.

⁵⁵ Marks and Lebel, "Disaster governance and the scalar politics of incomplete decentralization: Fragmented and contested responses to the 2011 floods in Central Thailand."; Neef, "Lost in Translation: The Participatory Imperative and Local Water Governance in North Thailand and Southwest Germany,"

opened up for new and younger elites to move into representative positions that previously did not exist.⁵⁶ Both, however, have been reported to increase corruption and abuse of power.

The discourse surrounding shortcomings of decentralisation and power transfers have been framed, particularly in relation to water resource management, through 'politics of scale' or 'scalar politics.' Widely used in the field of human geography, geopolitics, and political ecology, 'scales' was previously understood as a unit of analysis, whether in territorial terms (e.g. river basins) or political terms (e.g. local, national, global politics). As the discourse developed over the past several decades, 'scales' now generally refer to "spatial concepts of socio-political phenomena, whose continuous construction, deconstruction, and reconstruction express a 'social struggle for power and control."⁵⁷ When referring to 'politics of scale' or 'scalar politics,' the discourse during the turn of the century, as led by Cox and Sallie amongst others, surrounds the mobilization of these "scales" for different actors' - both individual and organizational – strategic interests. ⁵⁸ As the discourse shifts becomes increasingly constructivist and introspective, authors such as Neumann or Huedret conceptualise "scalar politics" in two key ways. On the one hand, "scalar politics" are conceptualised and analysed as interactions of power surrounding control over natural resources and its boundaries – which often involve state actors at local and national levels. On the other, the inseparability of the physical and territorial aspect of natural resources from human dynamics grounds the discourse from moving into an entirely theoretical sphere.⁵⁹ Scalar arguments within the context of water governance therefore concerns itself with the levels of power wielded by each organization,

⁵⁶ Dufhues, Thomas, Insa Theesfeld, and Gertrud Buchenrieder. 2015. "The Political Economy of Decentralization in Thailand: How Past and Present Decentralization Affects Rural Actors' Participation." *European Journal of Development Research*, 793-810

⁵⁷ Houdret, Annabelle, Ines Dombrosky, and Lena Horlemann. 2015. "The Institutionalization of River Basin Management as Politics of Scale - Insights from Mongolia." *Journal of Hydrology*, 2392-2404

⁵⁸ Cox, Kevin R. 1997. "Spaces of dependence, spaces of engagement, and the politics of scale, or: looking for local politics." *Political Geography*, 1-23

⁵⁹ Neumann, Roderick P. 2009. "Political ecology: theorizing scale." *Progress in Human Geography*, 398-406; Marston, Sallie A. 2000. "The social construction of scale." *Progress in Human Geography*, 220.

how to shift unwanted responsibilities, and where to draw boundaries – both in terms of geography and duty.

Applying these concepts to Thailand, it becomes evident that scalar politics is involved in the limited and incomplete decentralisation of water resource governance. According to Marks and Lebel, "decentralization is often a response to pressures from society to "re-level" political and bureaucratic hierarchies," which is represented in the 1999 Decentralization Law that followed the 1997 Constitution, also aptly known as the 'People's Constitution'. Due to the incompleteness of water resource management decentralisation within the bureaucracy, scalar politics come into play when each ministry and department determines their jurisdiction geographically and functionally as well as in the struggle to retain power.

Too Many Fingers, Too Many Pies

To have one's finger in every pie, the saying goes, is to be involved in a wide array of activities. In the case of water governance in Thailand, it would be fair to say there are too many actors involved in every activity. The way in which politics of scale plays into the decentralisation discourse provides an avenue through which both horizontal and vertical fragmentation can be visualised. As decentralisation has stagnated, the lateral struggle and overlap of power, responsibilities, and jurisdiction of each ministry and department becomes exemplified.

Horizontal and vertical fragmentation of governance in Thailand is therefore inherently intertwined. Local authors, such as Nikomborirak and Ruengthip, have argued that the root cause of this perpetual fragmentation is the absence of an overarching law that governs water resource management.⁶⁰ The question then becomes, *why* has there not been governing law over the past several decades *despite* the issue remaining in the government agenda? The

⁶⁰ Nikomborirak and Ruengthip, "History of Water Resource and Flood Management in Thailand,"

explanations given for the poor governance of water resource management, whether through horizontal or vertical fragmentation, or both, portrays an institutional, organizational, and financial understanding of water management decisions. However, ultimately, the literature so far has fallen short of engaging with the range socio-political and economic questions at the policy development sphere, which arguably plays a significant role in perpetuating fragmented governance. Power relationships within and across hierarchies, stakeholders with conflicting agendas, and political climate in its traditional sense all affect policy development and its ability to create, establish, and implement a long-term vision for water governance. This is the gap in the existing research that I seek to explore and bridge. As Zwarteveen et al. (2017) points out,

"the agency that different actors can exercise and wield in these negotiations stems from historically produced norms, which are tied up with deeply ingrained social identities and associated with structures of authority"⁶¹

Without looking at contributions of social identities and historically produced norms in a government's ability to produce an important – and sensitive – piece of legislature means that water governance in Thailand is not understood holistically. As such, the significance of this thesis is to explore socio-political relationships and identities surrounding each attempt at passing water governance legislatures. In particular, this thesis provides much needed insight into how the haphazard governance of water resources and the socio-political environment surrounding policy and law-making spaces are inherently intertwined and how they intrinsically inform one other. Without doing so, the existing literature falls short fully unpacking and understanding the failings of water governance in Thailand.

Chapter 3: The Pervasiveness of Political Polarisation in Drafting Procedures

⁶¹ Zwarteveen et al. "Engaging with the Politics of Water Governance: Engaging in Water Governance Discussions," 6

Laying the Political Groundwork

Political polarization in Thailand is not a new phenomenon. Throughout the past century, antagonisms between political elites and the masses have been pervasive in the fabric of Thai society, witnessing eruptions of violence every so often. Esteban and Ray (1994) identify three features of a politically polarised state. There is a "high degree of homogeneity of preferences within each group," "a high degree of heterogeneity of preferences across groups," and "a small number of significantly sized groups."⁶² Thai society observes all three of these features which have also become increasingly defined in more recent years. Following the incomplete democratic revolution in 1932 that resulted in today's constitutional monarchy, we see two factions begin to emerge and the tensions between the two factions ebb and flow throughout history. One of the bloodiest clashes between the two factions is during the 1970s, coinciding with the peak of the Communist threat in Thailand.⁶³ Clashes between student movements rallying for complete democracy and the military as the protector of the monarchy, the two factions that have continued throughout most of the 20th century until today revolves largely around those believing in a royalist democracy and a liberal democracy.

At one pole lies those within the "network monarchy," supported by the political and economic elites who believe in a "royalist democracy." According to McCargo, the "network monarchy" includes the monarch as well as those in the close circle of the monarchy that have a vested interest in its survival and dominance as a political and cultural institution within the fabric of Thai society.⁶⁴ It should be noted, however, that this network is does not operate under the direct command of the King, but are comprised of independent actors, such as wealthy elites, members of the military, those within the Privy Council, within a symbiotic relationship

⁶² Joan-Maria Esteban and Debraj Ray, "On The Measurement Of Polarization", *Econometrica* 62, no. 4 (1994): 819-851, doi:10.2307/2951734.

⁶³ Duncan McCargo, "Network Monarchy And Legitimacy Crises In Thailand", *The Pacific Review* 18, no. 4 (2005): 499-519, doi:10.1080/09512740500338937.

⁶⁴ McCargo, "Network Monarchy And Legitimacy Crises In Thailand"

with the institution of the Monarchy. Supporting the network monarchy lies the citizens that believe in a "royalist democracy," in which democratic governance occurs "under the guidance of the monarchy and royalist elites."⁶⁵ The democracy envisioned here has the King as the highest moral authority and is situated above all law and politics, where Thai people submit to being ruled by a "good man" or a "moral leader."⁶⁶ This sentiment has been legitimised over the past century, first with the narrative that Siam escaped colonialism as a result of the Monarch's enlightened ways, second, with the "triumph" over Communist activism in the 1970s, and, finally, with repeated military coups during Thailand's democratic transitions to replace "bad politicians" with "good" and "moral" leaders. Perpetuating this narrative is also the emergence of "hyper-royalism,"⁶⁷ a phenomenon developed as a propaganda machine in the campaign against communism, in which what is understood as royalism is dramatically intensified, pervading in public discourse and controlled through suppression of dissent. In recent decades, the perpetuation of this narrative is supported by the suppression of dissent through Article 112 of the criminal code, otherwise known as the lese-majesté law, in which "whoever defames, insults or threatens the King, Queen, Heir apparent, or the Regent, shall be punished with imprisonment of three to fifteen years."68

At the other pole lies those firmly in favour of liberal, participatory democracy. Though the embodiment of this faction has evolved over the past century, we see that the denominator of this faction is its demand for devolution of power to the masses. In the 20th century, this movement was largely led by student movements rallying against military dictatorships that often resulted in bloody clashes. Most recently, following the 1997 Constitution that enhanced

 ⁶⁵ Thannapat Jarernpanit, "The Contestation Of "Good Politics": Explaining Conflict And Polarisation In Thailand", *Asian Studies Review* 43, no. 4 (2019): 657-673, doi:10.1080/10357823.2019.1663785.
 ⁶⁶ *ibid*

⁶⁷ Thongchai Winichakul, "The Monarchy And Anti-Monarchy: Two Elephants In The Room Of Thai Politics And The State Of Denial", in *Good Coup Gone Bad: Thailand's Political Development Since Thaksin's Downfall* (repr., ISEAS–Yusof Ishak Institute, 2014), 79–108.

⁶⁸ "OFFENCES RELATING TO THE SECURITY OF THE KINGDOM", 112. Insulting or Defaming Royal Family § (n.d.).

the power of electoral politics, Ex-Prime Minister Thaksin Shinawatra empowered Thailand's rural populations to become a political force that challenged the royalist status quo.⁶⁹ As Thaksin ignited the political and economic development of the rural bloc in the North and the Northeast, traditionally the lowest strata of Thailand's hierarchical society, political elites, such as those in the military and the network monarchy, were threatened by such a powerful opposing force.⁷⁰ Resisting against the changing status quo, Thaksin's removal in the 2006 coup was deemed necessary. However, due to the string of boldly corrupt transactions, increasingly authoritarian governance, and human rights violations, the coup was believed to be justified and pandered well towards the royalist narrative of "bad politicians" vis-à-vis "good" and "moral" leaders.⁷¹

Despite Thaksin's removal from office, the two factions remained, as it has existed before him and will continue to exist without him. Thai society experienced its most recent bout of heightened polarisation. The military and many other elites found it difficult to shake off his legacy in Thai society. As years passed, the faction previously loyal to Thaksin began to transform into a movement that extended beyond Thaksin himself, but towards demands for liberal democracy, with transparency and accountability, free and fair elections, and political and civil liberties such as free speech. In anti-government protests during 2010, demands related to "justice outside of military and elite rule," which derived from experiences of "state violence and disadvantages in the power relations" and its impact on legal procedures against protestors.⁷² In more recent occasions that people have taken to the streets, a growing number of protestors call either for the removal of the monarchy institution from politics entirely or to bring the institution under the law. Noted by Winichakul, in the late 20th century, "anti-

⁶⁹ Winichakul, "The Monarchy And Anti-Monarchy: Two Elephants In The Room Of Thai Politics And The State Of Denial"

⁷⁰ Jarernpanit, "The Contestation Of "Good Politics": Explaining Conflict And Polarisation In Thailand"

⁷¹ Winichakul, "The Monarchy And Anti-Monarchy: Two Elephants In The Room Of Thai Politics And The State Of Denial"

⁷² Jarernpanit, "The Contestation Of "Good Politics": Explaining Conflict And Polarisation In Thailand"

monarchists were limited to radicals," while currently, anti-monarchists are "spread across various sectors of the population and regions."⁷³ As these demands extended beyond one man and into an ideology, antagonisms between the two factions became increasingly abstract, polarised, and violent.

An Overview of Draft Water Resources Acts

In 1992, the National Research Council (NRC) of Thailand attempted to draft a Water Resources Act. The NRC conducted seminars and conferences that included participation from key government agencies, such as the Office of National Economic and Social Development, Ministry of Agriculture and Cooperatives, and state-owned enterprises, such as the Metropolitan Waterworks Authority.⁷⁴ There are several points that should be highlighted in this Bill, primarily relating to property rights and the roles and responsibilities of governing organisations. First, natural water sources belong to the state, which runs in contrast with the common idea that water resources are a public good. Secondly, governing organisations are categorized into three levels: the National Water Resources Committee, which oversees national policy and infrastructure; Watershed Councils, which will be comprised of regional and local government officials and representatives from the National Water Resources Committee; and Water User Groups, which water users living within the same basin and have similar interests may organise to contribute to decision-making processes in at the Watershed level. However, there is no public participation at any level of governance and Water User Groups may be terminated if Watershed Councils deem such groups to be detrimental to the development, conservation, and usage of water resources within the basin.

⁷³ Thongchai Winichakul. *Thailand's Hyper-Royalism: Its Past Success and Present Predicament.* ISEAS–Yusof Ishak Institute, 2016, p27

⁷⁴ National Research Council, "Aia, G-波·施, 前近伊, 新美方近天, 近日, 社話 2000, 社話 2000, 近日, 近日, 2000, 20

The draft was submitted to the Cabinet for further consideration in 1994 and was required to be revised several aspects, including the roles and authority relating to the National Water Resources Committee as well as redundancies present in the draft compared to the "Enhancement and Conservation of the National Environmental Quality Act, B.E. 2535 (1992).⁷⁵ It was re-submitted following several revisions to the Cabinet in 1997 for further consideration; however, the 1997 Constitution was in the process of being finalised and the draft was requested to be put on hold.⁷⁶ The ratification of 1997 Constitution had several implications for the policy-making environment. It sought to strengthen political parties by including a "winner-take-all" electoral formula, while establishing the Senate and Judiciary as the necessary checks-and-balances against the newly empowered House of Representatives.⁷⁷ Additionally, dubbed the "People's Constitution", it also placed great emphasis on the participation of the public and citizen stakeholders in the policy and law-making processes. Consequently, as this draft of the Water Resources Act was created by bureaucrats and academics, there was significant pushback that claiming it did not meet the standards required by the newly ratified Constitution of public participation and was therefore tabled shortly after.78

While subtle, polarisation between two factions played a role in the failure of this draft. Leading up to the 1997 Constitution, there had been a violent clash between anti-government protestors and a military government in 1992 – the "Black May" incident in which over 50 civilians died.⁷⁹ Following three governments in the next five years, the 1997 Constitution was

⁷⁵ Department of Water Resources, "À îª, ĉi-tă-tê, łĩiớ?, 🏝, šối ŠĐộ îlới là Bồđể Ô Ìbởi, Ši Čối ŠĐộ, îlới [Project to Improve Laws Relating to Water Resources and Draft the Water Resources Act]", 2004, Bangkok

⁷⁶ ibid

⁷⁷ Janjira Sombatpoonsiri, "Two Thailands: Clashing Political Orders And Entrenched Polarization", in *Political Polarization In South And Southeast Asia: Old Divisions, New Dangers* (repr., Carnegie Endowment for International Peace, 2020), 67-80, <u>https://carnegieendowment.org/files/Political Polarization RPT_FINAL1.pdf</u>.; p74

⁷⁸ Department of Water Resources, "À îª, cī-tǎ, łīíð?, íð, žóišto, îlði læððæð Díliða, ši dóišto, ílð [Project to Improve Laws Relating to Water Resources and Draft the Water Resources Act]",

⁷⁹ Dominic Faulder, "Thailand In 1992: The Black Days Of May", Nikkei Asia, 2017, https://asia.nikkei.com/Politics/Thailand-in-1992-The-black-days-of-May.

ratified in the wake of the Asian Financial Crisis. The instability and political turbulence that ensued in the drafting of the Water Resources Act meant that it was susceptible to a derailing political incident such as the 1997 Constitution that would not have occurred without political polarisation between the two factions.

Later, following dramatic bureaucratic reforms by the government, the Ministry of National Resources and Environment was established in 2002. This Department of Water Resources would be tasked with drafting a new Water Resources Act a draft which emerged in 2004. While there have been other drafts created by other bodies during this time, such as those proposed by research councils and universities, this is the only draft that has been officially considered by relevant legislative bodies. That said, this draft has been subjected to revisions and resubmissions over the course of the last decade and a half. After the 1992 tabling of the Water Resources Act, the Water Resources Bill would not make it into the legislative process with the approval of the Cabinet again until2007. It was only in 2018 that the Water Resources Act was ratified.

The question here, therefore, is that, given the important role that the Act is expected to play in reforming the governance of water resources, why has it taken so long to ratify a Water Resources Act? This paper posits that political polarisation between two factions has been exemplified since Thaksin rose to power in 2001 and has played a key role in undermining the progress of the Water Resources Act. With water being such a fundamental matter to Thai livelihoods, the faction that was able to resolve the issue of poor governance that has been plaguing Thailand for many years would be credited for accomplishing a crucial task. The drafts have, therefore, provided a mechanism through which faction ideology can be woven into the governance of water resources.

The Intrinsic Element of Political Polarisation in Legislative Failures

The 1997 Constitution was set out to strengthen Thailand's democratic institutions. Instead of doing so, the credibility of policy-making mechanisms was damaged and riddled with mistrust. The result of political polarisation in Thailand has meant that there are ruptures in the continuity of governance in all aspects, with the governance of water resources taking a significant blow. This is for several key reasons: first, due to the legislative process of Thailand, the rupture and changes of governments through non-democratic methods mean that the process of legislative deliberation must restart with each new administration; second, these ruptures cause each draft to be susceptible to political intervention that is implicitly influenced by faction ideology; and, lastly, due to the sensitivity of the issue at hand, negotiation and compromise requires continuous deliberation periods – a condition that is not afforded when political ruptures occur every several years. Consequently, as political polarisation widens and instability deepens with time, it becomes harder to establish bipartisanship to allow the successful drafting, negotiation, and ratification of a Water Resources Act that would remain influential for the foreseeable future. Therefore, political polarisation in Thai society plays a key underlying role in the failure of the ratification of the Water Resources Act.

For the purposes of this thesis, I have compiled a concurrent timeline between political events in Thailand and the drafting process of the Water Resources Act by the Department of Water Resources, which can be seen in Figure 1.

Figure 1. Concurrent Timeline of Political Events in Thailand and the proposal of Water Resources Bill by the Department of Water Resources⁸⁰

Timeline of Water Resources Act Draft by the				Timeline of Political Events in Thailand
Department of Water Resources		+	2001	Thaksin is elected with a landslide victory. He is the first PM elected following the constitutional reforms.
Ministry of Natural Resources and Environment was established, under which the Department of Water Resources (DWR) resides	2002	+	· 2002	Decentralisation Act B.E. 2545 is passed, instigating massive bureaucratic reforms
DWR publishes their first Water Resources Act draft	2004	+	-	
		+	2005	Thaksin's party wins another election by a landslide
		+	- 2006	In the first quarter, "People's Alliance for Democracy (PAD)"movement against Thaksin gains momentum after Shinawatra sells its telecommunications firm tax-free
				In September, the military launches coup against Thaksin while he was abroad.
DWR draft is resubmitted and approved by the Council of Ministers and submitted to the Office of Council of State for revisions and is submitted to the Interim Legisaltive Assembly	2007	+	2007	Thaksin's party is ordered by the Constitutional Court to dissolve In August, the interim military government signs in the new Constitution and announces elections to be held in December
DWR is considered in the Legislative Assembly but failed to reach the 3rd Parliamentary Session due to then disagreements This is the first time a Water Resources Bill has reached parliament.				The interim government and parliament is dissolved to make way for elections, which is won by a new party made up of Thaksin supports, led by Samak Sundaravej
		+	2008	In September, Samak is removed from office on charges of bribery and parliament elects Somchai Wongsawat, Thaksin's brother-in-law as PM; Thaksin goes into self exile following a conviction over the sale of his company
				In November, protests calling for the removal of Somchai results in the closure of both of Bangkok's airports. Following the Constitutional Court's demand for the dissolution of the Party, protests cease.
				In December, Abhibist Vejjajiva, head of the Democratic Party and leader of the Opposition was appointed as PM
		+	- 2009	Pro-Thaksin demonstrators led by the "United Front for Democracy Against Dictatorship" (UDD) protested against the Abhisit government, calling it illegitimate
				In April, protests escalated, resulting in the East Asia Summit being stormed, forcing leaders from ASEAN, China, Japan, and South Korea to flee the scene A state-of-emergency was declared and protests temporarily ceased
		+	2010	In April and May, protests erupted again, paralysing Bangkok for months. A military crackdown was ordered by the PM which led to violent clashes, leaving at least 90 dead.
		+	2011	Abhisit announced he would hold elections in May, after changing electoral laws New elections were won by a landslide by another pro-Thaksin party led by Yingluck, Thaksin's sister.
				Within the first few months of the administration, Thailand experienced the worst floods in many years, calling it "The Great Floods"
		+	2012	Yingluck created two committees for flood control: The Strategic Committee for Reconstruction and Future Development and the Strategic Committee for Water Reource Management but did not have a legal authority to support it
In December, DWR resubmits draft of Water Resources Act to the Cabinet after amendments relating to bureaucratic reforms and recommendations following the 2011 floods but failed to progress further due to dissolution of Parliament	2013	T	• 2013	In the final quarter, anti-government protestors flood to the streets after it became public that the Yingluck administration had proposed an Amnesty Bill that would have led to Thaksin's return, paralysing Bangkok for months In December, Yingluck dissolves Parliament and calls early elections to defuse tensions
		t	2014	Yingluck called snap elections in February but was intercepted by protestors The Constitutional Court nullified the elections and Yingluck was subsequently removed from office several months later. General Prayuth Chan-ocha led the militiary coup against the government in May
DWR resubmits draft Water Resources Act to the Cabinet following the Coup The National Reform Council, an interim council overseeing the drafting of the Constitution, also proposed a Water Resources Bill. However, this was tabled, as the legislative process does not allow such interim councils to propose legislation	2015	+		
		+	2017	A new Constitution was ratified - the constitution was criticised for reducing power of political parties and strengthening the role of the military in politics
After revisions by the Legislative Assembly, the Water Resources Act is ratified in December, and will come into force in January of 2019	2018	+		

⁸⁰ Reuters Staff, "Timeline: Thailand's Turbulent Politics Over Two Decades", Reuters, 2019, <u>https://www.reuters.com/article/us-thailand-election-timeline-idUSKCN1R30HR;</u> Cod Satrusayang, "A Brief Oral History Of The 2014 Military Coup", Thai Enquirer, 2021, https://www.thaienquirer.com/13394/a-brief-oral-history-of-the-2014-military-coup/.

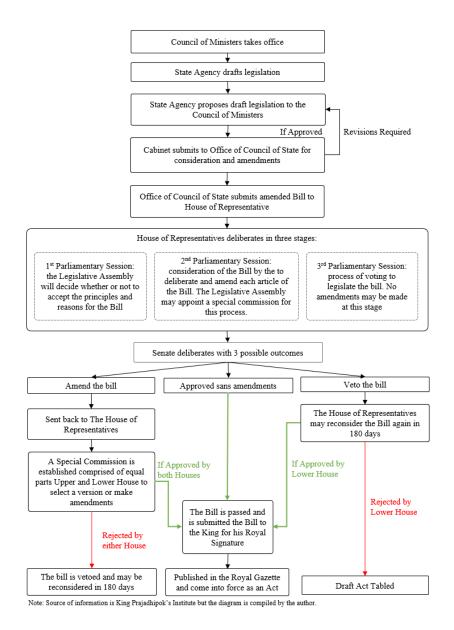
1. Legislative Interruption

Before delving into the discussion of political polarisation and legislative interruption, I believe it is important to shed light on the legislative process in Thailand. There has been some confusion regarding the number of drafts in circulation in the existing literature.⁸¹ I have compiled a visual representation of the legislative process in Figure 2. As there are many opportunities for revisions of the Bill submitted by the Department of Water Resources, such as by the Office of the Council of State and various Parliamentary sessions, there has been misperceptions in the literature as to how many drafts there have been and who has proposed which bill. The purpose of visualising this legislative process is to demonstrate that there has only been one Bill proposed in the legislative process over the past decade, which is by the Department of Water Resources in 2004. This is important to note, especially, because when there is a rupture in government processes, the legislative process must be restarted.⁸²

Since the Department of Water Resources drafted first their Water Resources Bill in 2004, Bills based on the same initial first draft has been submitted into the legislative process five times in approximately a decade before it was ratified to become a Water Resources Act. While the content of each submission differs due to the revisions made by previous attempts in the legislative process or to reflect new research and contexts, ultimately, these revisions are based upon the same initial draft that was created in 2004.

⁸¹ Daniel H. Unger and Patcharee Siroros, "Trying To Make Decisions Stick: Natural Resource Policy Making In Thailand", *Journal Of Contemporary Asia* 41, no. 2 (2011): 206-228, doi:10.1080/00472336.2011.553041.; Suwit Khunkitti, "An Institutional Perspective On Water Sector Performance In Thailand" (PhD, repr., University of Technology Sydney, 2019).
⁸² Pattrida Sukkunee, "@Oiii@Exist@Legislative Bills]", King Prajadhipok's Institute, accessed 11 June 2021.

Figure 2. Thailand's Legislative Process



The rupture of political institutions which resulted in the removal of government through non-democratic procedures means that legislative processes are halted. In the 1997 Constitution, 2007 Constitution, and the 2017 Constitution, Article 178, 153, and 147 respectively all outline the procedures regarding legislation across two administrations. All Constitutions essentially state that after the dissolution of parliament, any draft laws that are not revisited within a certain time frame is considered to be tabled. The revisiting of these laws must be done through a proposal by the Council of Ministers of the following administration and must be approved by the legislative assembly. Within the context of the Water Resources Bill, there is no continuous transition between work of the previous administration to the next administration. This is demonstrated either in the absence of a proposal by the Council of Ministers to continue the deliberation of Water Resources Bills or in the publication of an Order by the Council of Ministers that orders the discontinuation of all pending legislation. As this Bill has significant repercussions for many interest groups, the negotiation processes must inherently take time. While other Bills may be passed despite the frequent rupture in Thai legislative procedures, the time in between ruptures that is afforded to the Water Resources Bill is simply insufficient.

The frequency of such political ruptures can be attributed to the heightened tensions between two polarising factions in Thai society which has often led to violent clashes and the falls of governments. As these two factions – led by opposing ideologies – become increasingly polarised, demands become more absolute, often entailing in the removal of certain individuals from government, dissolution of parties, and, at times, the rewriting of Constitutions. The removal – whether by judicial or military means – of governments has often been used as a tool to bring an end to the opposing administration. Even in two-party politics, such as the United States with a Republican and a Democratic party or in the UK with the Conservative Party and the Labour Party, power is alternated between two dominant parties and transitions for these alternations occur through elections. However, the alternation of power that occurs in Thailand often comes through violent and non-democratic means - the governments are removed by an external party rather than through the electoral process. Since 1997, the only Prime Minister that has seen their administration come to term was Thaksin between 2001 and 2005. In other words, in the past two decades, the only time that Thailand has had two consecutive elections were in 2001 and 2005. With this in mind, the frequent ruptures in political spheres have been an important obstacle in the legislative process. This is seen to have

a direct effect on the legislative procedure in two instances: the 2007 submission during the coup and the 2013 submission ahead of the 2014 coup.

In 2007, the Department of Water Resources submitted the Bill to the Office of the Council of State, and the revised version of the Bill was submitted to Parliament later that year.⁸³ As the interim government following the coup had been in power since September 2006, their legitimacy to remain in power diminished, as the coup's purpose was to rewrite the Constitution was completed in August 2007.⁸⁴ After announcing the date of the next election to be in December of that year, time became a pressuring factor for the interim government to complete various amendments and parliamentary sessions to ratify the Bill. However, as elections approached, they were required to dissolve their government in anticipation of the newly elected government, resulting in the failure to ratify the Water Resources Bill.⁸⁵ The new legislative assembly published a legislative order to discontinue all draft legislations that were previously submitted during the 2006 interim military government.⁸⁶ As such, the only way for the Water Resources Bill to progress is through the re-submission of the Bill and restart the legislative process.

In December 2013, the Department of Water Resources resubmitted a Water Resources Bill to the Cabinet.⁸⁷ The Water Resources Draft had been revised in light of the governmental disaster during the handling of the 2011 floods and the organisational reforms implemented in 2012. A month prior, the Yingluck administration had submitted an Amnesty bill to Parliament

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⁸⁴ Reuters Staff, "Timeline: Thailand's Turbulent Politics Over Two Decades",

⁸⁵ Ibid.

⁸⁶ Thailand, Secretariat of the Cabinet, Summary of the Meeting of the House of Representatives, 2008, Accessible at: https://resolution.soc.go.th/PDF_UPLOAD/2551/992157251.pdf

⁸⁷ Department of Water Resources,

which would provide clemency to all politicians that have engaged in extrajudicial acts in the past decade, facilitating the return of former Prime Minister, Thaksin Shinawatra, from exile.⁸⁸ Once this Amnesty bill became public, the royalist faction that had called for Thaksin's removal in 2006 re-grouped under a different name, "the People's Democratic Reform Committee" (PDRC) and protested the Bill. As these protests increased in intensity, Yingluck attempted to prevent another uprising by dissolving Parliament and calling snap elections in early 2014. However, tensions only continued to escalate and the call for snap elections was rejected.⁸⁹ With the dissolution of parliament and unclear political directions, the Water Resources Bill was once again returned to the Department of Water Resources.

Having discussed the direct impact that frequent political ruptures may have on the ratification of the Water Resources Act, an indirect impact can also be observed during the tumultuous political climate between 2008 and 2011. While the direct impact of these political ruptures resulted in the process being discontinued and restarted, an indirect impact of frequent political ruptures is that the Department of Water Resources would refrain from submitting the Bill into the legislative process at all. The 2006 coup ended with the military calling general elections in December of 2007, which was won by another Thaksin-backed party. With Thaksin's corruption scandals so recent in Thai collective memory, movements opposing Thaksin in 2006 mobilised in 2008.⁹⁰ The Prime Minister was removed by the Constitutional Court later in 2008 following bribery and corruption charges and Thaksin's brother-in-law was elected as the new party leader and Prime Minister.⁹¹ Further protests ensued against the Thaksin-backed party and increased significantly in intensity, resulting in the closure of both Suvarnabhumi Airport and Don Mueang Airport in Bangkok, which ultimately led to the

⁸⁸ Sombatpoonsiri, "Two Thailands: Clashing Political Orders And Entrenched Polarization", p71

⁸⁹ Reuters Staff, "Timeline: Thailand's Turbulent Politics Over Two Decades",

⁹⁰ Sombatpoonsiri, "Two Thailands: Clashing Political Orders And Entrenched Polarization", p70-71

⁹¹ Reuters Staff, "Timeline: Thailand's Turbulent Politics Over Two Decades",

dissolution of the Thaksin-backed party demanded by the Constitutional Court.⁹² In December of 2008, the leader of the opposition party and the second-largest party in Parliament, Abhisit Vejjajiva was then appointed Prime Minister. This spurred intense protest from pro-democracy and pro-Thaksin factions, claiming that Abhisit's premiership was illegitimate, as he was not elected. These protests escalated to the extent where an East Asian Summit was stormed in March and April of 2009, causing many international leaders to evacuate.⁹³ As a result, Abhisit authorised a violent military crackdown on the protestors, which left over 90 dead, and enacted a state-of-emergency, facilitating a temporary cease in protests and violence.⁹⁴ However, this was short-lived as protests reignited in 2010. As protests continued to escalate, Abhisit eventually relented, calling for elections in May of 2011. Due to the instability and frequent change in governments in these years, the Department of Water Resources had refrained from redrafting and resubmitting a draft Water Resources Bill to the Cabinet, as there was insufficient time for the proposal to even be considered by the Cabinet. This reason cited in the report submitted to Parliament in 2013.⁹⁵

2. Ideological Intervention

Throughout the different revisions of the Water Resources Bills, we can identify patterns of ideological infusion in the Bills depending on the faction currently in power. As I have mentioned previously, the two factions revolve around their own ideology of *who* should govern the country. On the one hand lies a pro-democracy group, which has been pushing for the expansion of political and civil liberties throughout the second half of the 20th century and, in the 21st century, was largely personified by Thaksin. This faction has often demanded

⁹² Ibid

⁹³ Reuters Staff, "Timeline: Thailand's Turbulent Politics Over Two Decades",

⁹⁴ Sombatpoonsiri, "Two Thailands: Clashing Political Orders And Entrenched Polarization", p71

⁹⁵ Department of Water Resources,

Report on the Study, Review, and Consultation of Public Opinions on the Water Resources Bill]"

increasing public participation and consultation in the decision-making processes of laws and policies. On the other hand lies a more royalist group largely consisting of the political and economic elites who believe in a "royalist democracy." The democracy envisioned here has the King as the highest moral authority and is situated above all law and politics, where Thai people submit to being ruled by a "good man" or a "moral leader."⁹⁶ In order to identify such ideological infusions within the revision and drafting process of the Water Resources Bill, it would be beneficial to briefly contextualise the political environment leading up to the first Bill submitted by the Department of Water Resources in 2004.

In 2001, businessman Thaksin Shinawatra won the national elections, quickly reorganising the bureaucracy and garnering the support of previously marginalised regions of Northern and North-eastern Thailand. He dramatically reformed the existing bureaucratic system by reshuffling existing Ministries, Bureaus, and Departments, during which the Ministry of Natural Resources and Environment was established and under which the Department of Water Resources would reside and be responsible for drafting the Water Resources Act. His empowerment of rural voters, though, would cause friction with existing institutions and fan the flames of Thailand's political polarisation. The promotion of social mobility, implementation of welfare policies, and enfranchisement of marginalised populations made him immensely popular, as evidenced by his landslide victory in 2005, holding over 60% of parliamentary seats, with the next largest party holding only 96 seats out of the 500 available.⁹⁷ The increasing popularity of Thaksin amongst rural populations threatened the

⁹⁶ Jarernpanit, "The Contestation Of "Good Politics": Explaining Conflict And Polarisation In Thailand" ⁹⁷ "Thailand: Angus Reid Global Monitor", Angus Reid, 2005,

https://web.archive.org/web/20061015164045/http://www.angus-reid.com/tracker/index.cfm?fuseaction=viewItem&itemID=5271.

existing establishment, as the rising mobility of rural populations threatened the hierarchical and paternalistic society that had the monarchy as the "champion of Thailand's rural poor."⁹⁸

2004 Submission by the Department of Water Resources in the Thaksin era

It was against this backdrop that the first Water Resources Act was submitted into the legislative process in 2004. The influence that Thaksin's government had on this draft was substantial. The Water Resources Act was in line with the sentiments behind the Decentralization Act B.E. 2542 and the empowerment of civilians in decision-making processes. The researchers drafting the law organised 9 public consultations out of the 12 river basins in Thailand and included, among local communities, government officials and stakeholders in industry and agriculture in the drafting process. The issues discussed specifically referred to water rights and appropriate management organisations, becoming one of the most inclusive processes of policy-making procedure in Thailand.⁹⁹ This draft also firmly placed the property rights of water in the hands of the public, calling it a public good.¹⁰⁰

In terms of the organisational structure proposed, the Bill outlines four levels of governance: the National Water Resources Committee at the national level, the River Basin Committee at the basin level, River Basin Sub-Committee, and Water User Groups.¹⁰¹ In the roles and responsibilities mandated in the Bill, it is evident that the bulk of the decision-making power lies with the River Basin Committees, with the National Water Resources Committee responsible only for national direction, harmonisation across water basins, and conflict

¹⁰⁰ The words in Thai specifically say "OG DCED-RILL Which directly translates to "water is a public good", the proposed Bill can be found in the appendix of the 2004 Report "À'î*, CI-ÌX-ĨE, HIGP, É, ŽÖIŠEÖ, ÎLĞI PEĞCEOTETE, ŠI ČETE, ÎLĞ [Project to Improve Laws Relating to Water Resources and Draft the Water Resources Act]" ¹⁰¹ Chapter 3, Water Resources Bill, 2004

⁹⁸ Allen Hicken, "Phak Or Phuak? The Questionable Development Of Partisan Identity In Thailand", *APSA Annual Meeting Paper*, 2010.

⁹⁹ Unger and Siroros, "Trying To Make Decisions Stick: Natural Resource Policy Making In Thailand", p220

resolution between basins. The River Basin Committee, on the other hand, had the responsibility of creating plans to prevent and resolve issues of flooding and water scarcity within the river basin and to request assistance from the Ministry of Natural Resources and Environment when required in times of crisis. Perhaps most notably is the legal authority that the River Basin Committee holds: the Committee is at liberty to establish River Basin Subcommittees should it be found necessary after consultation with civilians living within the river basin as well as the fact that the governance and organisation of Water User Groups within a basin is entirely at the discretion of River Basin Committees.¹⁰² Water User Groups, as defined by the Bill, is to be created by water users living near each other under the same river basin and have similar interests in how water resources should be governed.¹⁰³

The decentralisation of governance in the Bill proposed is reminiscent of the internationally proposed Integrated Water Resources Management framework. The framework posits that river basin committees should be at the centre of governance designs, with water user groups to support the committees from the bottom-up and a committee at the national level to ensure that the governance and direction of all water basins are integrated and harmonised.¹⁰⁴ The decentralisation of such governance would allow for decision-making to accurately and appropriately cater towards the needs of constituents that may differ from basin to basin while the integration of these basin committees within the national organisation would provide an avenue for conflict resolution or coordination between basins in inter-basin matters. In doing so, the Bill provided a way in which governance would be decentralised but integrated in a way that did not infringe upon the governance spaces afforded to the rural masses.

¹⁰² Chapter 3, Water Resources Bill, 2547 (2004)

¹⁰³ Ibid

¹⁰⁴ J. J. Hukka et al., "Water, Policy and Governance," *Environment and History* 16, no. 2 (2010), http://www.jstor.org/stable/20723778.

The rhetoric of this Bill also mirrors the rhetoric of empowering the masses and decentralising governance, even in areas outside of water governance. The design of the water governance system empowered rural masses to contribute to the decision-making processes, either through the registration of water user groups or within river basin sub-committees. This is particularly relevant due to the reliance on the agricultural industry by previously marginalised and disenfranchised populations in the Northern and Northeastern regions of Thailand.¹⁰⁵ It could also be argued that, with water being such a crucial resource to the livelihoods of many Thais, especially the rural masses that Thaksin had recently garnered the support of and found a political stronghold in, it was politically important to share this power in governing water resources to the masses.

2007 Re-submission During the Coup

Following the anti-Thaksin protests in 2005 that erupted after the questionable sale of his telecommunications firm, suspicions of corruption, and human rights violations, the military staged a coup against the government in 2006. Perhaps most damningly, leaders of the movement and the coup firmly believed in Thaksin's opposition to the monarchy and discursively framed the coup as protecting the institution.¹⁰⁶ Instead of diminishing the support of Thaksin, the coup instead further polarised Thai society, as the rural populations - many of whom were loyal to Thaksin due to the empowerment and social mobility afforded to them felt disenfranchised again.¹⁰⁷ This coup would also mark "another turn in the country's approach to water management."¹⁰⁸

¹⁰⁵ Sombatpoonsiri, "Two Thailands: Clashing Political Orders And Entrenched Polarization"

¹⁰⁶ Anders Engvall, "Political Polarization in Thailand", In: Engvall, Poverty and Conflict in Southeast Asia, (2006); Sombatpoonsiri, "Two Thailands: Clashing Political Orders And Entrenched Polarization" ¹⁰⁷ Engvall, "Political Polarization in Thailand"

¹⁰⁸ Andreas Neef, "Lost In Translation: The Participatory Imperative And Local Water Governance In North Thailand And Southwest Germany", Water Alternatives 1, no. 1 (2008): 89-110., p95

In 2007, the Department of Water Resources re-submitted the Water Resources Bill and was revised dramatically by both the Office of the Council of State and the Parliament during Parliamentary Sessions, which was significantly influenced by politics at the time. There were two key areas of the revisions that are worth examining: who owned water and who governs water. Concerning property rights, the Bill had been revised such that all water sources found in natural environments *belonged* to the state and is a public good.¹⁰⁹ While the access to water resources remain unchanged, such that constituents may use water as necessary to their livelihoods, this is quite a linguistic shift from the previous Bill which did not explicitly attribute ownership of natural water resources to an entity, only that it was public property.¹¹⁰ The linguistic shift here demonstrates a method of centralisation by asserting the role of the central government in the management of water resources.

With regards to the governance of water, the decreased responsibilities attributed to the River Basin Committee and the increased responsibilities of the National Water Resources Committee further demonstrates the attempt at centralising the governance of water resources. The National Water Resources Committee that would be established would be responsible for creating policies, national strategies, and coordination between state organisations and local governments; the River Basin Committees are now almost entirely accountable to the National Water Resources Committee, in which most of their responsibilities would also require approval from either the National Water Resources Committee or the Minister of Natural Resources and Environment.¹¹¹ This is further compounded by the removal of the possibility for River Basin Committees to establish Sub-committees, reducing the level of decentralisation. The establishment, organisation, and governance of Water User Groups are also revised to be

^{109 &}quot;Öi SEB, î A is the Draft Water Resources Bill 2550

¹¹⁰ Chapter 2, Article 8 of Draft Water Resources Bill 2550 (2007)

¹¹¹ Chapter 3 of the Water Resources Bill, 2550 (2007)

accountable to ministerial regulations released by the National Water Resources Committee rather than the River Basin Committee.¹¹²

It is clear, therefore, that the interim government sought to centralise the governance of water resources into the hands of the central government. This would also be consistent with the rhetoric of the royalist and pro-establishment faction, which is represented by the political and economic elite – a strata that supported the overthrow of the Thaksin government and the ensuing military coup. As identified by many scholars, the 2006 coup was largely about preserving the social hierarchy that had governed Thailand for the better part of the 20th century, such that the old oligarchy and those within the network monarchy remained at the top.¹¹³ The threat that Thaksin posed to the status quo was a very real one, given his ability to monopolise the electoral system in such a rapid and effective way and his social reforms that were swift and far-reaching. The threat he posed became even more exemplified when viewing the loyalty and support of the masses in light of the "trail of corruption accusations and alleged abuses of power."¹¹⁴ With the dangers and the threat posed by the rural masses to the political and economic elite in the city center, there was significant support from the urban middle class and business elites for political reforms away from previous efforts to decentralise power.¹¹⁵ To the extent that the elites refused the decentralisation of power to the masses, they blamed the political crisis of 2005-2006 on an "incompetent government run by rural politicians."¹¹⁶ The polarisation of society now embodied many elements of identity politics with cleavages along economic classes and the urban-rural divide which wholly contributed to each faction embodied. The legislative process, therefore, became a tool through which the elites attempted

¹¹² Chapter 3, Article 36 of the Water Resources Bill 2550 (2007)

¹¹³ Kevin Hewison, "Thaksin Shinawatra And The Reshaping Of Thai Politics", *Contemporary Politics* 16, no. 2 (2010): 119-133, doi:10.1080/13569771003783810.

¹¹⁴ Thitinan Pongsudhirak, "Thailand Since The Coup", *Journal Of Democracy* 19, no. 4 (2008): 140-153, doi:10.1353/jod.0.0030.; p143

¹¹⁵ Prajak Kongkirati, "The Rise And Fall Of Electoral Violence In Thailand: Changing Rules, Structures And Power Landscapes, 1997-2011", *Contemporary Southeast Asia* 36, no. 3 (2014): 386-416, doi:10.1355/cs36-3c.

¹¹⁶ Kongkirati, "The Rise And Fall Of Electoral Violence In Thailand: Changing Rules, Structures And Power Landscapes, 1997-2011", p390

to resist and repel efforts of further devolution of power to the rural masses. The governance of important resources – water, in particular – remaining at the hands of the central government could be seen not only as an attempt to centralise power and a manifestation of this ideology but also as an attempt at establishing control over the resources that rural masses depended on.

This Bill would come the closest to being ratified and legislated, but due to changes in government and the deliberation period needed, the Bill fell short of reaching the Third Parliamentary Session – the session in which the House of Representatives would vote whether to approve or table the Bill before sending it to the Senate.¹¹⁷

2013 Re-submission of the Water Resources Bill in the Yingluck Administration

The re-submission of the Water Resources Bill would not occur again for another six years as a result of the political climate in the country and the re-submission came at a crucial point in the timeline of Thailand's water governance. The 2011 Great Floods exposed the significant shortcomings in the way water resources was being governed in Thailand, especially in terms of preparedness and resilience of communities, local governments, and coordination mechanisms between regional and national government organisations against natural disasters.

Following the political turbulence in Thailand between 2008 and 2010, elections were finally held in May 2011 which was won by a Thaksin-backed party, led by his sister Yingluck Shinawatra.¹¹⁸ Within months of her administration, Thailand experienced one of the worst floods in recent history during the monsoon season. In its wake, Yingluck established two new committees specifically overseeing the prevention and management of floods, the National Water Policy and Flood Committee and the Office for Water and Flood Management

¹¹⁷ Nopadol Puikertsub ($\hat{u}\tilde{O}^{\circ}$ | $-\hat{E}^{\circ}$, \hat{E}°) Expert Lawyer and Head of Legal Development, Legal Affairs, Department of Water Resources), in discussion with author, May 2021

¹¹⁸ Reuters Staff, "Timeline: Thailand's Turbulent Politics Over Two Decades",

Committee.¹¹⁹ At the broader level, Yingluck also created the Strategic Committee for Water Resources Management which would be headed by the Prime Minister and operates under the Prime Minister Office; however, like other water governance organisations in the past, the authority and legitimacy of these organisations become non-existent once the Prime Minister is no longer in office, as the authority to implement policy and undertake its responsibilities rely solely on executive power.¹²⁰

In light of the floods and the limited authority of the organisations established by Yingluck, it became obvious that an Act legally and financially supporting organisations in the management of water resources was crucial. To do so, the Bill was re-submitted to the Cabinet in 2013 and revised. Again, looking at the roles and responsibilities of relevant agencies, we can see that power is being decentralised back to River Basin Committees. Linguistically, the report on the Bill amendments made specific reference to the framing of property rights of water, claiming that the reference of water resources should be "public water resources" instead of "state water resources", to properly acknowledge that water is a public good.¹²¹

Additionally, in light of the inefficiencies of centralised governance and the bureaucratic processes throughout the mismanagement of the 2011 floods, it was believed that providing river basin committees with greater authority would enable more efficient and effective decision-making, especially in times of crisis. The same report refers to the mismanagement of the 2011 floods, claiming that there is too much of a delay between the regional governments' request for assistance from Ministers in the central government and the Ministers announcing appropriate measures for water allocation and flood mitigation which

¹¹⁹ Tsuruyo Funatsu, "Organizational Reformation On Water Resources Management After The 2011 Thailand Great Floods", in *Politics Of The Environment - The Formation Of "Late-Comer" Public Policy* (repr., Chiba: Institute of Developing Economies, 2021).

¹²⁰ Duenden Nikomborirak and K. Ruengthip, "History of Water Resource and Flood Management in Thailand," (2013), TDRI Policy Brief

¹²¹ Department of Water Resources, "im a my faith and the second secon

has resulted in preventable devastation in affected areas.¹²² Consequently, the revised draft decentralises power back to the River Basin Committees. While River Basin Committees are still required to submit prevention and I needa mitigation plans to the National Water Resources Committee ahead of time, in emergencies where disasters were not forecasted, the handling of such disasters should be at the discretion of River Basin Committees.¹²³

Furthermore, the voices of water users are empowered significantly in 2013 Bill. The Bill mandates that water users must be able to properly register as a Water User Group and their contribution to the decision-making processes at the river basin level and the national level should not impact their access to public water resources.¹²⁴ Furthermore, the ministerial regulation determining the establishment, organisation, and governance of Water User Groups must include public consultation of water users in various river basins before publishing.¹²⁵ In contrast to the 2007 Bill, this ministerial regulation was not required to conduct public consultations and the governance of water users was at the discretion of the National Water Resources Committee and the Ministry of Natural Resources and Environment, this addition to the 2013 Bill thus demonstrates that Water User Groups are strengthened as key stakeholders.

The rhetoric of this Bill, once again, resembles the 2004 Bill in its attempt at decentralisation and empowerment of grass-root communities. While Yingluck's party had won an absolute majority in Parliament, winning 264 seats out of 500, her ability to dramatically revise and influence the Bill was limited due to the compromises she would be required to make for the stability of her government and the fragility of the political climate following years of violence.¹²⁶ Consequently, while there were revisions implemented to

¹²⁴ Chapter 3, Article 34 of the Water Resources Bill 2556

¹²² *Ibid.*

¹²³ Department of Water Resources, "iBOOMACIAD-AI, ayofAorada Air, ayofAorada Air Andrew Air Andr

¹²⁵ Chapter 3, Article 35 of the Water Resources Bill 2556

¹²⁶ Tania Branigan, "Thai Army 'Will Not Challenge' Yingluck Shinawatra Coalition", The Guardian, 2011, https://www.theguardian.com/world/2011/jul/04/thai-army-not-challenge-shinawatra.

decentralise power further, these reforms could not be as drastic and governance could not be as decentralised as the 2004 draft during her brother's administration.

The hopes placed on this Bill were also cut short with the dissolution of Yingluck's parliament in December of 2013 due to escalating protests of the anti-Thaksin movement. The rhetoric employed by the protestors, led by those loyal to the monarchy was particularly driven by ideology through the use of linguistic mechanisms. The protestors framed their movement as the "war between good and evil", in which those loyal to the monarchy represented the "good" under the guidance of moral authority of the monarchy and were fighting to eliminate the "evil" and corrupt politicians represented by Thaksin, calling those loyal to Thaksin as ignorant and uneducated.¹²⁷ The invocation of such ideological and emotive language elevated the tensions between the two poles dramatically, drawing out mass mobilisation from both facts and often resulting in violent clashes between both sides. According to Sombatpoonsiri (2020), over thirty bombings or attacks took place in Bangkok within the first half of 2014, as tensions between the two factions reached its peak. In May of 2014, the military, led by General Prayuth Chan-ocha, conducted a coup against the government in an attempt to restore peace within the country.

2015 Re-submission of the Water Resources Bill and the ratification of the Act in 2018

One of the first issues that the National Council for Peace and Order (NCPO), which was led by General Prayuth Chan-ocha, addressed was to review all water resources management plans that Yingluck introduced and put them on hold.¹²⁸ The Department of Water Resources re-submitted another Bill which was passed through the Office of the Council of State and considered in parliament in 2015. Concurrently, there was a submission of a new

¹²⁷ Kongkirati, "The Rise And Fall Of Electoral Violence In Thailand: Changing Rules, Structures And Power Landscapes, 1997-2011", p482;

Winichakul, "The Monarchy And Anti-Monarchy: Two Elephants In The Room Of Thai Politics And The State Of Denial", ¹²⁸ Funatsu, "Organizational Reformation On Water Resources Management After The 2011 Thailand Great Floods"

draft in 2015 by the National Reform Council (NRC) headed by the junta.¹²⁹ However, this draft was considered ineligible, as the legislative process does not allow for interim councils to propose their own legislation, only to consider legislation proposed by existing state agencies.¹³⁰ What is quite worth noting is that, despite the ineligibility, as the drafters of the 2015 NRC Bill were also those in Parliament at the time, once the 2015 submission of the Department of Water Resources reached Parliament, the revisions made to the 2015 DWR Bill became very similar as to what was initially proposed in the 2015 NRC draft. As demonstrated in Figure 3, the composition of the National Water Resources Commission¹³¹ in the 2018 ratified Water Resources Act bears resemblance to the 2015 NRC Bill.

The 2018 Act also dramatically re-centralised power to the hands of the central government in several ways and much more so than in the 2007 Bill that was also considered by the interim military government at the time. First, the Bill that was proposed in 2013 and 2015 by the DWR saw all organisations accountable to the Minister of Natural Resources and Environment, such that the National Water Resources Committee would present their national plans and strategies to the Minister and the ministerial regulations that would be announced would be provided through the Minister.¹³² The Act that was passed in 2018 following parliamentary amendments, on the other hand, sees all organisations accountable to the Prime Minister and the Prime Minister is appointed as the key decision-maker in inter-basin conflict resolution and occasions of emergencies, such as floods and droughts.¹³³ The decision to make Drainage Basin Committees¹³⁴ independent in the decision-making processes during times of

¹²⁹ *ibid*

¹³⁰ Nopadol Puikertsub (uõo | -Éréőiše) (Expert Lawyer and Head of Legal Development, Legal Affairs, Department of Water Resources), in discussion with author, May 2021

¹³¹ Previously known as "National Water Resources Committees" in translations provided by the Office of the Council of State on previous Bills. The name "National Water Resources Commission" is in accordance with the translation of the Water Resources Act provided by the Office of the Council of State.

¹³² Draft Water Resources Bill 2558 (OCS document No. 1427/2558)

¹³³ Draft Water Resources Bill 2558 (OCS document No. 1427/2558); Water Resources Act B.E. 2561

¹³⁴ Previously known as "River Basin Committees" in translations provided by the Office of the Council of State on previous Bills. The name "Drainage Basin Committee" is in accordance with the translation of the Water Resources Act provided by the Office of the Council of State.

crises in the 2013 draft has also been repealed, with the Prime Minister placed with the responsibility to declare severe droughts territories and prescribe water conservation methods and prohibit certain water use types.¹³⁵ In the establishment of Water User Bodies,¹³⁶ their organisation and governance will also be prescribed in the ministerial regulations that are issued by the Prime Minister rather than the Minister of Natural Resources and Environment.¹³⁷

Second, comparing the composition of the National Water Resources Committee of the 1994 draft that was tabled based on reasons of centralisation and absence of public consultation with the composition of the National Water Resources Commission in the Water Resources Act that was passed, the composition is almost identical. This indicates the drastic recentralisation of power at the hands of a few ministries. Additionally, the Secretariat body would be created as a new organisation operating under the Prime Minister's Office. The position of the Secretariat Office has been quite contentious, as the Ministry holding this position would have significant influence over not only the decision-making processes of organisations at all levels of governance but also the budget allocation and usage.¹³⁸ The Secretariat Office of the National Water Resources Commission would also act as the secretariat body for river basin committees and serve as the point of reference between local government organisations and relevant sectors to ensure integration and coordination at various levels of governance.¹³⁹ As such, shifting the responsibility from the Ministry of Natural Resources and Environment to an organisation directly under the Prime Minister's Office demonstrates a tactical move to further the reach of the central government in regional and local water governance.

¹³⁵ Article 58, Water Resources Act, B.E. 2561

¹³⁶ Previously known as "Water User Groups" in translations provided by the Office of the Council of State on previous Bills. The name "Water User Bodies" is in accordance with the translation of the Water Resources Act provided by the Office of the Council of State.

¹³⁷ Article 38, Water Resources Act, B.E. 2561

¹³⁸ Funatsu, "Organizational Reformation On Water Resources Management After The 2011 Thailand Great Floods"

¹³⁹ Article 23 and 37, Water Resources Act B.E. 2561,

Against the backdrop of intense violence and the culmination of such emotive and ideological clashes leading up to 2014, it is unsurprising that the measures the junta, backed by royalist supporters and the network monarchy, would implement drastic measures in Thailand's governance. The Water Resources Act, B.E. 2561 demonstrated these measures taken to recentralise power and to increase the influence of political and economic elites, which would be politically backed by the 2017 Constitution that largely cemented the royalist faction's positioning within the central government.

It is evident throughout the various revisions of the same draft that faction ideology was infused with the deliberation process and manifested in the organisational structure, roles, and responsibilities that would be overseeing the governance of water resources. The way that these ideologies revealed themselves in the draft would be illustrated in the level of centralisation or decentralisation within the organisational structure, which also mirrors the perspective through which each faction views how Thailand as a country should be governed. Ultimately, with the swift coup in 2014 that set out to revise the Water Resources Bill from the get-go, the Water Resources Act that was finally ratified embodied the ideology of social hierarchy and centralised governance. The extremity of the centralisation in comparison to, say, the 2007 draft that was also revised by the interim military government, truly demonstrates the deterioration of Thai social fabric and the widened gap between the two ideological factions that have been pushed further to the extremes.

Draft (Year, Author)	1993 National Research Council	2004 DWR	2007 DWR (after amendments by Office of the Council of State)	2013 DWR (resubmission)	2015 DWR (resubmission)	2015 National Reform Council (submitted but removed)	2018 Water Resources Act (passed)
Chairman	Prime Minister	Prime Minister	Prime Minister	Prime Minister	Prime Minister	Prime Minister	Prime Minister
Vice Chairman	Deputy Prime Minister	1 Minister of National Resources and Environment 2 Minister of Agriculture	Minister of National Resources and Environment	1 Deputy Prime Minister 2 Minister of National Resources and Environment	1 Deputy Prime Minister 2 Minister of MONRE	Specialist	Deputy Prime Minister
Committee Members	 Ministry of Agriculture, Ministry of Science, Technology, and Environment, Ministry of Health Ministry of Industry Secretary General of the National Economic and Social Development Board Secretary General of the Office of the Council of State Director-General from the Budget Bureau President of the Marine Department President of the Royal Irrigation Department 	 Ministry of Interior Director-General of the Budget Bureau President of the Royal Irrigation Department President of the Department of Groundwater Resources Department of Water Transportation Director of Metropolitan Waterworks Director of Regional Waterworks Director of EGAT Representatives of RBCs Representatives of Water User groups Representative of Local Governments Representative of the private sector 	 Ministry of Agriculture and Cooperatives Ministry of Energy Ministry of Industry President of Industry President of the Royal Irrigation Department President of the Department of Groundwater Resources Department of Water Transportation Representatives of RBCs Specialists appointed by the Prime Minister 	 Ministry of Agriculture and Cooperatives Deputy Minister of Ministry of Natural Resources and Environment Ministry of Energy Ministry of Industry Ministry of Industry Ministry of Industry Ministry of Transport Ministry of Transport Ministry of Science and Technology Secretary-General of the NESDB President of Royal Irrigation Department President of Department of Groundwater Resources President of Department of Land President of Disaster Control Director-General from the Budget Bureau Representatives of RBCs 	 Minister of Agriculture and Cooperatives Deputy Minister of Ministry of Natural Resources and Environment Ministry of Energy Ministry of Industry President of Royal Inrigation Department President of Groundwater Resources Representatives of RBCs Representatives of WUGs Specialists 	 Minister of Agriculture and Cooperatives Minister of Natural Resources and Environment Minister of Interior Minister of Interior Minister of NESDB Director of the Bureau of Budget Representatives of RBCs Representatives of WRGs, Specialists 	 Minister of Agriculture and Cooperatives Minister of Transport Minister of Natural Resources and Environment Minister of Energy Minister of Industry Secretary-General of the NESDB Secretary-General of the RID Director of the Bureau of Budget Representatives of RBCs Representatives of WUGs Specialists
Secretariat Office	Office of the National Water Resources Committee (to be set up by Prime Minister's Office)	Department of Water Resources	Department of Water Resources	Department of Water Resources	Department of Water Resources	Office of National Water Resources Committee (to be set up by Prime Minister's Office)	Office of National Water Resources Committee (to be set up by Prime Minister's Office)

Figure 3. A Comparison on the Composition of the National Water Resources Committee in Various Drafts and Revisions¹⁴⁰

¹⁴⁰ All the reports on draft legislation, including 2536; and Funatsu, 2016

3. No Opportunity for Compromise

It is quite a feat that a Bill first proposed in 2004 would take 14 years to complete the legislative process and be ratified. As mentioned in Chapter 3, many scholars have blamed the fragmented and disastrous governance on the absence of an Act that can provide relevant organisations with the legal authority to conduct duties and responsibilities required for effective governance. However, perhaps a more important question to raise is why it has taken this long, despite the circulation of the Bill in legislative circles for almost a decade and a half. As illustrated in this Chapter so far, political polarisation has been a significant hindrance in the progress of the Water Resources Bill, whether it is through the interruption of legislative procedures, requiring the process to be restarted, or whether it is through the desire to infuse faction ideology within the Bill that would eventually be passed. I would like to suggest one more component to the way political polarisation has hindered the progress of the Water Resources Bill, which is that there has been little room for compromise between the two factions.

Firstly, in times of free-flow politics where the legislative assembly is elected by the people, the two factions are able to compete on the policy-making floor. The Water Resources Bill was introduced when tensions between two factions were rising again. As the years progressed, mass mobilisation was weaponised by political leaders pushing for increasingly "maximalist demands" and refusing compromise.¹⁴¹ With every violent clash resulting death or injury of loved ones by the opposing faction, the rift between the two poles widens, making it increasingly difficult to bridge the gap for any form of bipartisanship.¹⁴² This polarisation and uncompromising stance becomes heightened in the context of water governance, given the importance of the Bill on the majority of Thai people and the political clout one would receive.

¹⁴¹ Sombatpoonsiri, "Two Thailands: Clashing Political Orders And Entrenched Polarization", p74 ¹⁴² *ibid*

Secondly, in 2007, the interim military government revised the draft to reflect faction ideology. However, the interim military government could not remain in office long enough to deliberate and ratify the Water Resources Bill, as they lacked legitimacy and were under significant pressure for new elections. Compounded with the sensitivity and the gravity of the issue at hand, time becomes an important variable, as time is needed for deliberation and negotiation. This is something that is not afforded with the rupture and overthrow of governments every few years.

Nevertheless, in 2014, the military coup and its claim for an "indefinite" stay to create a "genuine democracy" were endorsed by the monarchy.¹⁴³ With this support, the military government became virtually untouchable with the support of the monarchy. Under these circumstances, time was no longer scarce and, as is the nature of a military coup, there was no opposition within the legislative assembly. What this afforded to the junta and his allies was the absence of the requirement of compromise and the unlimited element of time, creating the stable policymaking environment that would enable the ratification of a Water Resources Act. To be clear, I do not claim that a military coup nor the violent suppression of opposition is a requirement for policymaking nor is it a good thing to have in the political sphere; I am merely stating that in the context of Thailand, the combination of these circumstances made it possible for the Water Resources Act to be ratified.

What is also important to note here is that the times that the Water Resources Bill came closest to ratification is during times of interim military governments following a military coup. It could be inferred that, with the lack of opposition, the government was able to swiftly push the Water Resources Bill through the agenda. The 2007 Bill's process was expedited with very

¹⁴³ Thomas Fuller, "After Coup, General Vows To Create A 'Genuine Democracy' In Thailand (Published 2014)", The New York Times, 2014, https://www.nytimes.com/2014/05/27/world/asia/thailand.html.

few challenges, having taken less than a year to start and almost finish the entire legislative process.

To conclude briefly, I have argued that political polarisation has played a crucial but underlying role in the failure to ratify the Water Resources Act. The absence of this overarching law has been attributed by many scholars as the reason why water governance in Thailand has been so fragmented and ineffective and I have sought to analyse and explain the political underpinnings preventing its ratification despite the same Bill circling the legislative process for over a decade. The reasons for these failures, therefore, are attributed to the impact that political polarisation has on, first, legislative interruptions which meant that the legislative process must restart after each political rupture emerging from clashes between the two factions. Second, the ideology purported by each faction has also shaped the way they believe water resources should be governed; as such, with each alternative government and rupture, the draft would be revised in a way that captures their ideology. However, as these things take time, another political rupture would occur before the Bill would be passed. Finally, due to the extent to which Thai society has become polarised, the ability for politicians to close the rift between the two factions and compromise becomes virtually impossible. As such, we see each of the obstacles essentially removed with the military government that has been in place since 2014. The military government had been endorsed by the monarchy for an indefinite stay in power, allowing them the time needed to mould the Bill in accordance with their ideological views, and they were afforded the absence of opposition in the legislative assembly, meaning that there was no requirement for compromise and bipartisanship. The amalgamation of these factors is why the Bill was passed in 2018, four years after the military coup, and not earlier.

Chapter 4: Policy Implications: Water Resources Act B.E.2561 and Beyond

With the Water Resources Act B.E. 2561 enacted 3 years ago, this Chapter sets out to discuss the extent to which this Bill addresses existing governance issues. I will argue that the Act made great strides in addressing core coordination issues between existing governing bodies and in integrating water resources governance, but these strides are not without substantial implementation challenges. I would also preliminarily argue that these strides are not sufficient to overcome future challenges, especially with regards to climate change risks. The Chapter will proceed as follows. First, I will be providing a brief overview of the Water Resources Act. The overview will centre around two issues: organisational reform and property rights. Second, I will discuss the ways in which this Act was able to address existing governance issues with reference to horizontal and vertical fragmentation that I explained in Chapter 3. I will also be delving into the shortcomings of the Act itself as well as the challenges of implementing this Act that have occurred over the past 3 years, such as capacity building obstacles and the impact of COVID. Lastly, I will be exploring how equipped this Act and the organisations attached to it are in the face of future climate change risks.

The Water Resources Act B.E.2561

After years of deliberation, the Water Resource Act was finally passed through Parliament and published by the Royal Gazette in 2018, formally enshrining Thailand's first Act on governing water resources. The Act was enacted with the intention of establishing an integrated law that oversaw: "the allocation, use, development, management, maintenance, rehabilitation and conservation thereof as well as rights in water, thereby benefiting the provision of public utility services and other public interests."¹⁴⁴

The Act is split into two parts, the first of which has been effective 90 days after its issuance in the Royal Gazette. The second, which required the deliberation and establishment of organic and supplementary laws, would be effective within 2 years after its issuance in the Royal Gazette.

The two main endeavours that the Act seeks to accomplish is to implement organisational and governance reforms and to establish clear and enforceable property rights.

1. Organisational Reforms

The Act brought about two stages of organisational reform. First, it established a new, integrated, and centralised agency to oversee national water governance and reformed existing water management governing bodies at the basin and local levels. Second, the Act lays out 30 organic laws that need to be drawn up and enacted to support the Act, which also largely revolves around adjusted organisational roles and responsibilities.

¹⁴⁴ Office of the Council of the State, "Unofficial Translation of the Water Resources Act. B.E. 25641". http://web.krisdika.go.th/data/document/ext843/843709_0001.pdf

approval of Water User Groups. Some of the responsibilities of the Committee include creating a 20-year strategy for water management, for which the Committee will propose relevant policies and supplementary laws to the Cabinet to be implemented; regulating project plans and budgetary allocation for water management projects at all levels and monitor their progress; and overseeing allocation of water resources to different water user groups, which includes prioritisation of water user groups in times of water crises such as droughts. The National Water Resources Commission is chaired by the Prime Minister, providing the Committee with the highest and overriding authority below the Cabinet, consists of Ministers from relevant Ministries such as the Ministry of Agriculture and the Ministry of Transport, and is supported by the Office of National Water Resources (ONWR) which acts as the Secretariat body.¹⁴⁵

At the basin level, Drainage Basin Committees (~-È, îĩi, ĉi **b**ô will be established as the main organisation for driving water resource management within the boundaries of a drainage basin. Previously, there were 25 Watershed Councils, but the geographical boundaries of Thailand's basins will be redrawn under the Water Resources Act to ensure harmonisation of upstream, midstream, and downstream participation in decision-making processes. Under these new geographical boundaries, 22 basins – and Drainage Basin Committees – were established. These committees would be chaired by an elected member of the Provincial government and consist of local government representatives, Water User Bodies representatives, and specialists, with the ONWR acting as the secretariat body. These committees are responsible for creating a Master Plan at the basin level which outlines the management of water resources during normal times and prevention and mitigation measures during crisis times (floods and droughts). This committee is also responsible for overseeing

¹⁴⁵ Water Resources Act B.E. 2561, Chapter 3

water allocation to water user groups at the basin level and will be responsible for implementing crisis plans in accordance with the NWRC.¹⁴⁶

At the user level, the Act acknowledges three sectors for water usage (agricultural, industrial, and commercial) and distinguishes between three types of water usage: household level, industry level, and large, inter-basin level. Water users living and operating within the same water basin have the right to organise and register as Water User Bodies (Å^{av}) and are classified as either "Type One" users, "Type Two" users, or "Type Three" users. "Type One" users consist of commercial and public users in which water is used for household consumption and agriculture or livestock farming for subsistence – the use of which is "in a small quantity."¹⁴⁷ Users that fall under this category are not required to obtain a license or pay for their water usage; however, they are required to report information on their water usage to the NWRC. "Type Two" users largely belong in the industry sector and encompasses water usages for electricity generation, waterworks, and other undertakings of a similar calibre. "Type Two" users are required to obtain a license from the appropriate authority on a case-bycase basis and their usage must be approved by the Drainage Basin Committee. "Type Three" users embody those that require public water resources for large undertakings involving "a large quantity of water" that may have "effects across drainage basins or covering large areas."148 Users in "Type Three" must receive permission to conduct such projects from the NWRC.

¹⁴⁶ Water Resources Act B.E. 2561, Chapter 3

¹⁴⁷ Water Resources Act B.E. 2561, Chapter 3, Section 41

¹⁴⁸ Ibid.

Figure 4. A summary of new organisations and their responsibilities under the Water

Resources Act, B.E. 2561.

Level	Name of Organisation	Members	Responsibilities
National	National Water Resources Commission	 Chairperson: Prime Minister Committee Members: Minister of Agriculture and Co-operatives, Minister of Transport, Minister of Natural Resources and Environment, Minister of Energy, Minister of Interior, Minister of Industry, Secretary-General of the National Economic and Social Development Board, Secretary-General of the Royal Development Project Board and Director of the Bureau of the Budget Representatives from Drainage Basin Committees and Water User Groups Office of National Water Resources as the Secretariat Body 	 National organisation responsible for overseeing integration and direction of water management at all levels of governance Creation of national strategies and plans, including organic laws and policies Ensuring that drainage and local level water management plans are consistent with the national vision Regulating budgetary allocation for water management projects in every Ministry Overseeing allocation of water resources to different user groups, determining prioritisation of groups in times of crisis
	Office of National Water Resources		 Acts as the Secretariat body to the National Water Resources Committee Act as a secretariat body to Drainage Basin Committees Point of contact at Drainage and User level to ensure harmonisation of plans and budgets, provide guidance
Basin	Drainage Basin Committees	 Elected provincial governor as the Chairperson Local government representatives at the district and sub-district levels, Water User Bodies representatives, and specialists as committee members Office of National Water Resources as the Secretariat Body 	 Creation of a Master Plan for governance of water resources at Basin level To create and implement prevention and resolution plans and measures during floods and droughts
Water User	Water User Bodies	 "Type One": commercial and public users, such as household consumption or agriculture "Type Two": industry-level users, such as electricity generation, waterworks "Type Three": large projects involving more than one drainage basin 	 Water users living and operating within the same water basin have the right to organise and register as a Water User Body Role is to represent organisation's interest in governance at the drainage level

The National Water Resources Commission is also responsible for the creation of 30 organic laws relevant to the proper governance of water resources, which is outlined in the Water Resources Act and is provided in the Appendix. Many of the sensitive issues that had previously been sources of conflict within the negotiation processes in the past have been

relegated to the status of the organic law. The reasoning is that having a Water Resources Act passed through parliament and published in the Royal Gazette is of utmost importance, as the Act has the legal authority to support an organisation in governing the usage of water resources. As mentioned in earlier chapters, the lack of legal backing has been the downfall of many attempts at creating a water management organisation in the past. Consequently, by mandating the creation of certain laws, the Act dictates that sensitive issues, such as water fee collection, be addressed and resolved through law.

2. Property Rights

Who owns water? This has been a point of contention for several of the previous draft Water Acts that failed to garner majority support. Before there had been any drafting of Water Resources Bills, access to water had been open and free to citizens.¹⁴⁹ In the past, the issue of property rights has caused tensions between the government and the user groups. Prior to the 1997 Constitution that demanded stakeholder consultation and public participation in the creation of all Acts and laws, water resources belonged to the state and, under times of water scarcity, the state had the authority to demand the relinquishment of private water storages for public use.¹⁵⁰ Once public consultations were required, the issue of whether water belonged to the public or to the state became a contentious matter.

According to Section 7 of the Water Resources Act B.E. 2561,

"public water resources are publicly owned. A person has the right to use or keep water to the extent necessary for the benefit of his activities or his land without causing grievance or damage to other persons who may use such water."¹⁵¹

Relating to Water Resources and Draft the Water Resources Act]", 1994. Bangkok

¹⁵¹ Water Resources Act B.E. 2561, Chapter 2, Section 7

Although known among users in practice, the Act puts into writing that property rights of water follow a consensus called 'riparian rights', which had been the norm over the past several decades. These riparian rights indicate that water is owned by the public where landowners living alongside bodies of water have the *right* to make *reasonable use* of the water as it flows downstream. The implication of *reasonable use* is determined by downstream users such that there is sufficient water supply flowing from upstream users; it also implies that there is an unspoken communal contract among users of the same river basin that limits individual use.

The Water Resources Act: The Panacea for All Governance Woes?

1. Great Strides Towards Addressing Vertical and Horizontal Fragmentation

In Chapter 2 I outlined historical failures of water governance, ranging from the handling of natural disasters such as floods and droughts, as well as poor management of water infrastructure development. In Chapter 3, I framed such failures into two categories: horizontal fragmentation and vertical fragmentation. I identify vertical fragmentation as "the absence of an overarching governing body to integrate water governance at all levels and the incomplete devolution of power that was ignited in 1999".¹⁵² Both factors have resulted in *ad hoc* water governance projects without clear direction or strategy as well as natural disasters being handled reactively rather than proactively. Horizontal fragmentation refers to "the splintering of power and responsibilities, which is seen in the way that there were over 30 governmental agencies that were responsible for water governance and, undoubtedly, these responsibilities overlapped. The lack of inter-agency communication resulted in inefficient and incomplete governance of national water resources."¹⁵³

¹⁵² See Chapter 3 of this thesis

¹⁵³ See Chapter 3 of this thesis

In addressing vertical fragmentation, the Water Resources Act ameliorates this issue in two main ways: establishing an overarching governing body to integrate governance and to effectively decentralise governance. The NWRC was established as the governing body at the national level to oversee all water projects at all levels of governance. The NWRC's is not only responsible for drawing up a 20 Year Water Vision in line with the National 20 Year Plan but is also responsible for overseeing and approving water governance plans drawn up by Drainage Basin Committees and local governments. The role as a guiding body at the national, regional, and local level that is played by the NWRC provides integration of governance that previously did not exist. In doing so, such integration can bring about more efficient use of water resources, especially as water scarcity becomes an increasingly large threat in Thailand, while generating accountability at various levels of governance that previously did not exist.

Secondly, organisational reforms as mandated by the Act restructured the disastrous role decentralisation had on water governance over the past decades. Previously, decentralisation of water governance resulted in trickling down of budgetary resources and significant responsibilities without guidance or retraining.¹⁵⁴ This failure to decentralise knowledge can be attributed to several things, which has been outlined in Chapter 3. The organisational reforms conducted involved the re-establishment of Drainage Basin Committees and Water User Bodies. Unlike previous watershed or river basin committees, the involvement of ONWR in the Drainage Basin Committees as both a Committee member and as a Secretariat will enable the transfer of knowledge and to ensure that basin plans were consistent with national level plans. Additionally, coupled with the budgetary allocations, powers devolved to Drainage Basin Committees can be used more efficiently and effectively in governing activities involving water resources. Involved within these Drainage Basin Committees are representatives from Water User Bodies. This is in line with the Decentralization Act of 1999,

¹⁵⁴ Teerapong Wongsiwawilas (Secretary-General to the Cabinet of Thailand), in discussion with the author, April 2021

which demands increasing public participation in policy decision-making processes. The formalisation of water user groups within a certain river basin will not only allow interests to be organised but will provide a formal channel through which these interests can be heard. As such, the establishment of the NWRC and the distribution of ONWR representatives at various levels create a vertical management of water resources that is both integrated and decentralised.

With regards to horizontal fragmentation, the establishment of NWRC and ONWR and its mandates addresses previous issues of overlapping agencies and lack of cross-agency communication. As part of the Committee's mandate, it will have influence over projects that are conducted by other government agencies, such as projects undertaken by the Royal Irrigation Department or the Ministry of Agriculture, if these projects are to impact water resources in any capacity. An example of its reach may include the requirement by the Act for NWRC's input in road or rail infrastructure development conducted by the Ministry of Transport should such projects have the potential to interfere with waterways.¹⁵⁵ Additionally, any funding or budgetary requests for projects relating to water must be approved by the NWRC before being submitted to the Cabinet for further consideration¹⁵⁶; this is to ensure that projects conducted by different government agencies do not overlap and do not conflict with each other. With the creation of NWRC and ONWRC, a gatekeeper of redundant projects and a channel of communication and coordination has also emerged; with this in mind, should the Act be adhered to by all governmental agencies, the issue of horizontal fragmentation should diminish with time.

2. Implementation Dilemmas: Challenges to Organisational Reforms, Sensitive Issues, and Implementation Delays due to COVID-19

¹⁵⁵ Somkiat Prajamwong (Secretary-General to the Office of the National Water Resources), in discussion with the author, April 2021

¹⁵⁶ Further information on this can be found in Articles 2 and 4 of Section 17 of the Water Resources Act, B.E. 2561

In order for the Water Resources Act to be approved by all parties involved, several compromises had to be made, which meant that certain critical issues were excluded from the Act and were to be addressed in organic laws.¹⁵⁷ To ensure that these critical issues were addressed, the Act placed a two-year limit on the creation of all supplementary laws.

The first key shortcoming – and challenge – resulting from these compromises and constraints surrounded organisational reforms. As this was an entirely new organisation, the organisation had to be built from scratch. Although the Act outlined which Ministers would be Committee Members for the NWRC, positions and roles for supplementary organisations, such as the ONWR and Drainage Basin Committees, were not yet established. This is perhaps most evidently seen in the establishment of Drainage Basin Committees: the Committees required representatives of Water User Groups. However, Water User Bodies have not been formed yet, as existing groups would need to be re-registered under the new system and new groups (created either as a result of newly aligned interests or as a result of the redrawing of basin boundaries mentioned above) will have to be registered. The registration process of Water User Bodies only started at the beginning of 2021,¹⁵⁸ which demonstrates a significant delay in organisational reforms that the Water Resources Act intended.

Within the ONWR agency, the NWRC faces significant challenges for capacity building. There are essentially two routes that the NWRC could take: first, to transfer employees from other Ministries that are already conducting water-related projects and, second, to hire new employees to fill in required positions. The first option is met with an age-old issue Ministries hoard resources – people and otherwise – and are reluctant to consent to employee transfers. The second option is met with the dilemma in which new employees would require on-the-job training which would not only take time and further delays in implementation but

 ¹⁵⁷ Somkiat Prajamwong (Secretary-General to the Office of the National Water Resources), in discussion with the author,
 April 2021
 ¹⁵⁸ Ibid.

also in an organisation where manpower is already scarce. As such, the ONWR is currently growing but the targets for capacity building are not being met.¹⁵⁹ This shortcoming has vast consequences on the ability of the NWRC to carry out day-to-day operations, such as drafting crucial organic laws, especially on sensitive issues, and overseeing local transitions for governance of water resources. So, while the Act seems promising, the implementation of the act seems to be quite far from what the Act hopes to achieve.

Secondly, the Act has shifted the responsibility for tackling sensitive issues onto those drafting supplementary laws, which creates further delays to implementation. One such issue lies with re-drawing geographical boundaries for river basins. Not only does this task require immense attention to detail, which involves repeated inspections on the names of districts and sub-districts, the task itself is highly delicate and political. Although studies have been conducted on the optimal drawing of boundaries, due to the various agencies and stakeholders involved, the finalisation and implementation of basin borders is tremendously contentious. Envisioned through the lens of "politics of scale," the authority of social and political actors extends to the limits of their geographical boundary: local administrations' powers extend to the borders of their district, while provincial administrations' powers extend to the borders of their province. At the basin level, however, as water is borderless, the geographical limits to the powers of political authorities leading basin committees are murkier, and they have a vested interest in seeing their borders expand. As such, undertaking the task of redrawing the geographical boundaries of basin committees will produce winners and losers in terms of reach and responsibilities. Without clear and concrete formation of these borders, the NWRC could not continue with creating Drainage Basin Committees. The organic law outlining the territories of river basins took over a year to be drafted and published in the Government

¹⁵⁹ Teerapong Wongsiwawilas (Secretary-General to the Cabinet of Thailand), in discussion with the author, April 2021

Gazette. As this law was foundational to other organic laws and further development of organisational reforms, other organic laws were further delayed.

Another sensitive issue that was not addressed in the Act but was placed in the responsibility of those drafting organic laws is related to water fees of "Type Two" and "Type Three" users.¹⁶⁰ As the implementation of water fees have largely been evaded over the past several decades, whether by the Royal Irrigation Department or as a result of significant resistance from the agricultural sector, the Act sought to reform and implement the collection of water fees for industrial and large-scale users.¹⁶¹ With highly organised lobbying powers of those in the industrial sector and those capable of undertaking large scale projects, the issue of water fees continues to be highly politicised. As of April 2021, the organic laws responsible for overseeing such fees remains in the drafting process.¹⁶² Again, highly politicised and delicate issues continue to be the causes of delays in implementing the Water Resources Act and has significant impact on the NWRC's ability to govern water resources effectively. Due to these delays on establishing the framework for fee collection, the NWRC has lost out on three years' worth of water fees, which could have been used for local water governance projects or towards mitigating flood and drought risks. While the delay in and of itself does not represent the capacity of the Act to resolve existing governance issues if given sufficient time, it does demonstrate to the herculean tasks that lie ahead of the NWRC. As such, it would be sensible to err on the side of caution when assessing the ability of the NWRC to translate the Act into practice.

¹⁶⁰ See Appendix 1.

¹⁶¹ The reference to rates of water fees is mentioned briefly in Section 48 of Chapter 4 of the Water Resources Act, B.E. 2561. The Section only states that there will be "fees for licenses for water use of Type Two and fees for licenses for water use of Type Three" but does not state how these fees will be determined, what penalties shall be prescribed in instances of non-compliance, and how will be collecting these fees.

¹⁶² Row 8 and 9 of Appendix 1

Finally, the impact of COVID-19 on NWRC's ability to implement the Water Resources Act was rather vast, instigating massive delays and imperfect implementation. The first State of Emergency declared in Thailand in late March 2020 and Lockdown measures were implemented until the gradual easing of restrictions from mid-May until August.¹⁶³ With the second and third outbreaks of COVID-19 towards the end of 2020 and in April 2021, partial lockdown measures have increasingly been implemented across the country, with the strictest restrictions occurring in Bangkok, and both the public and private sector are encouraged to work from home.

Lockdown, work from home, and social distancing measures have created immense obstacles for the continuation of the Water Resources Act for several reasons. First, in accordance with the Decentralization Act of 1999, public participation is required in the drafting process of all laws, which is also now protected in the 2016 Constitution.¹⁶⁴ These public participation processes have been impacted by COVID-19 measures, especially when stakeholders who need to be consulted do not have access to digital devices that would enable such processes.¹⁶⁵ This is particularly evident in organic laws relating to compensation fees, particularly on the guidelines for calculating compensation for relocation and for other land-use purposes, which is to be carried out by the Ministry of Interior. This law is still in the drafting process. Another law that has a large number of stakeholders that need to be consulted is the organic law on the guidelines and measures for conservation and development of public water resources. The stakeholders involved include local water users from different sectors, environmental NGOs invested in conservation of natural resources, and provincial and basin

¹⁶³ Randy Thanthong-Knight, "Thailand To Impose Broad Lockdown To Fight Novel Coronavirus", Bloomberg.Com, 2020, https://www.bloomberg.com/news/articles/2020-03-25/thailand-to-impose-broad-lockdown-to-fight-spread-of-coronavirus.; Mongkol Bangprapa, "Complete End To Lockdown On July 1", Https://Www.Bangkokpost.Com, 2020,

https://www.bangkokpost.com/business/1925768/complete-end-to-lockdown-on-july-1.

¹⁶⁴ For reference, see Section 77 of the 2016 Constitution of Thailand

¹⁶⁵ Somkiat Prajamwong (Secretary-General to the Office of the National Water Resources), in discussion with the author, April 2021

level stakeholders, amongst others. Due to the restrictions place to curb the spread of the COVID-19 pandemic, the ability for stakeholder consultations to occur and the efficiency in doing so is dramatically reduced.

Furthermore, the government's prioritisation of supporting the domestic economy will also come at the expense of the Water Resources Act's implementation. Thailand's economy has been under severe pressure since early 2020, shrinking by almost 10%, due to the heavy reliance on the international tourism industry.¹⁶⁶ However, with the second and third waves of COVID-19 and delays in vaccine deployment, Thailand's economy is expected to remain in trouble for some time.¹⁶⁷ In efforts to ameliorate the dire economic situation in Thailand, the government has reduced the budget for other Ministries and governmental organisations to stimulate the Thai economy and provide economic relief for the hardest hit citizens. Approximately 20-30% of the NWRC's budget was reduced in 2020 and the same is expected in 2021, due to the increasingly severe COVID-19 situation.¹⁶⁸ Without the monetary support to conduct research and consultations, continue infrastructure development projects, and pursue water governance projects at the local and regional levels, many plans and implementations must therefore be delayed. Although the government loans, this is not a sustainable solution, nor is it an adequate one.

Yet, the need for proper management of water resources becomes even more critical during the era of COVID-19 and lockdowns. As big cities such as Bangkok enter lockdowns, urban migrants working in the informal economy have significantly reduced income, but their

¹⁶⁶ Kirida Bhaopichitr, "Thailand's Economic Outlook For 2021", TDRI: Thailand Development Research Institute, 2020, https://tdri.or.th/en/2020/12/thailands-economic-outlook-for-2021/.

¹⁶⁷ Amarin Jitnathum, "Thailand Economic Monitor January 2021: Restoring Incomes; Recovering Jobs", World Bank, 2021, https://www.worldbank.org/en/country/thailand/publication/key-findings-thailand-economic-monitor-january-2021-restoring-incomes-recovering-jobs.

¹⁶⁸ Somkiat Prajamwong (Secretary-General to the Office of the National Water Resources), in discussion with the author, April 2021

living expenses do not decrease. According to the Bangkok Post, around half of Bangkok's population are internal migrants who have migrated from rural areas.¹⁶⁹ Without work, these populations temporarily migrate back home to find work in the agricultural sector and generate income.¹⁷⁰ As such, the availability and quality of water resources then plays a crucial and even greater role than before for rural populations. Not only does household consumption of water increases, demand for agricultural purposes also increases. Proper management of water resources is therefore crucial and the delayed implementation of the Water Resources Act due to reasons beyond the NWRC's control increases this urgency.

Ultimately, while the Water Resources Act itself seems to provide solid solutions for existing governance shortcomings, the implementation of the Act paints a gloomier picture. The Act's approach towards tackling horizontal and vertical fragmentation seems to be a step in the right direction; however, the compromises that were required to push the Act through meant that new issues of governance emerged. Riddled with implementation challenges both as a result of the vagueness of the Act surrounding sensitive issues and from reasons beyond the NWRC's control, it seems that governance challenges will continue to plague the management of water resources for several years to come. That said, the Secretary General of the Office of National Water Resources remains firm on grounding the drafting of supplementary laws and governance projects in academic research and claims that the research is expected to conclude in the upcoming months. As such, the progress of water resource management reforms is expected to move more smoothly in 2022.¹⁷¹ Perhaps this is a ray of

¹⁶⁹ Paritta Wangkiat, "Strong Cities Needed", Bangkok Post, 2018, https://www.bangkokpost.com/thailand/special-reports/1503802/strong-cities-needed.

¹⁷⁰ Somkiat Prajamwong (Secretary-General to the Office of the National Water Resources), in discussion with the author, April 2021

¹⁷¹ Somkiat Prajamwong (Secretary-General to the Office of the National Water Resources), in discussion with the author, April 2021

hope for effective and efficient water resource governance in the long run – although slow to start, those in charge are committed to laying sturdy foundations.

Preparedness for the Impact of Climate Change

Thailand, like other Southeast Asian countries, is set to be one of the most impacted countries by climate change in the upcoming decades. In particular, the ramifications of a climatic occurrence called El Niño Southern Oscillation (ENSO) is exceptionally strong on the region and Thailand in particular. Two characteristics of El Niño are particularly relevant to Southeast Asia: rainfall deficits and increased severity of tropical cyclones. As mentioned in Chapter 2, the worst drought brought about by El Niño was during the 2015-2016 period. Additionally, the weak El Niño phenomenon in 2018 had severe repercussions on water scarcity for several years through to the 2020 droughts; the combined impacts of both El Niños brought about immense economic losses to the country and to livelihoods. Compounded with the expected rising intensity of climate change, the effects of El Niño are expected to be more severe. Dry seasons will not only be extended but will also become hotter. Therefore, water scarcity will become an increasingly pressing issue not only due to decreased rainfall but due to increased surface evaporation. Additionally, while the number of tropical cyclones is expected to decrease, the severity of these storms is expected to increase.¹⁷² As such, coastal regions and river basins in Southeast Asia will be at higher risk for floods, impacting farmland and settlements. The ADB predicts that without proper climate change mitigation policies and implementation, these impacts could "shave 11 percent off the region's GDP by the end of the century as it takes a toll on key sectors such as agriculture, tourism, and fishing."¹⁷³

¹⁷² Francesca Franzetti, Alessandro Pezzoli and Marco Bagliani, "Rethinking Water Resources Management Under A Climate Change Perspective: From National To Local Level. The Case Of Thailand", in *Renewing Local Planning To Face Climate Change In The Tropics* (repr., Cham: Springer, 2017), 169-195.

¹⁷³Amit Prakash, "Boiling Point", Finance & Development 55, no. 3 (2018): 22-26.

1. Existing Tools for Climate Change Mitigation and Natural Disaster Amelioration

Turning to the Water Resources Act, Chapter V of the Act details how relevant agencies are to handle drought and flood prevention and resolution. The Drainage Basin Committees are to prepare plans for prevention and resolution of drought and flood occurrences that takes into account proceedings when droughts and floods are foreseen to occur, and when droughts and floods are more severe than expected or were unexpected entirely. These plans must be approved by the NWRC to ensure the alignment with national plans in place. The preparation of these plans should identify the relevant agencies involved – whether they are impacted by these occurrences, whether they are involved in the implementation of these plans, and their role in providing aid to affected peoples – and the budget required for these operations. With regards to the public, the plan should involve dissemination of information to the public such as raising public awareness on how to control water uses during droughts or capturing water for further use during floods. During such circumstances, should the impact of droughts or floods extend beyond the boundaries of one river basin, the Prime Minister may step in to issue notices to harmonise action between Drainage Basin Committees.

Beyond this, there is little outlined on drought and flood management. Earlier in February, the NWRC released an announcement defining "Guidelines for Managing Flood Risks and Establishment of Flood Warning Systems" (WÃCT, CLATCE, CLATC, CLATC, CLATC, CLATCE, CL

In practice, the NWRC and Drainage Basin Committees have been working closely with the Meteorological Department in developing the use of information technologies and inter-agency communication to predict expected rainfall patterns more accurately in the upcoming year. In a conversation with Mr. Somkiat Prajamwong, Secretary General of the ONWR, Mr. Prajamwong explained that the Meteorological Department had informed the NWRC that the monsoon season is expected to start earlier this year by several months. The implication of this earlier monsoon period is that the dry season at the end of 2021 will therefore be extended, increasing the risk for water scarcity for both agricultural usage and household consumption. As such, the NWRC in tandem with provincial governments implemented measures of optimising the capture of rainfall to prevent excess run-off. Such methods include constructing waterways that lead towards existing reservoirs and dams to maximise rainfall capture, encourage farming of dry season crops ahead of the dry season, impose a framework that limits the use of pumps for irrigation purposes to ensure secure water supply for future dry months. Due to the onset of tropical storms and increased rainfalls, the NWRC is also working closely with provincial governments to improve floodway systems to reduce the risks of flooding in urban and low-lying areas. As of May 2021, communication and risk mitigation at various levels of water governance has proved successful in that flooding in urban and lowlying areas have been prevented.

2. Are these measures enough?

Short answer: perhaps for now. The NWRC and Drainage Basic Committees are working against the clock: as the impacts of climate change intensifies, their preparedness for mitigation and adaptation becomes more crucial to Thai livelihoods. The NWRC and the Water Resources Act seem set on prevention and have acted rather quickly in the recent months to take advantage of the early rainfall while mitigating flood risks. Although it seems as though they are on the right track, it remains unclear how well these prevention plans will translate into reality. It is understandable that the Act remains vague on the details of prevention and resolution methods in order to provide flexibility and creativity according to the various basins in Thailand; however, with significant delays as outlined previously, the bulk of the responsibility seems to lie on the shoulders of the NWRC which may reduce the efficiency and effectiveness of implementing flood and drought mitigation. The biggest test for the NWRC's ability to handle the occurrences of floods and droughts will be towards the end of 2021 where the dry season arrives early and the budget for water resources management has been cut as a result of COVID-19 economic stimulation measures.

Looking more long-term, however, it does not seem as though the Water Resources Act or the NWRC are equipped to handle the challenges of climate change. A key issue that has been raised by climate change reports but has not been addressed by the Water Resources Act is the increasing salinity of freshwater and its impact on water quality and the agricultural sector. Rising sea levels and storm surges in coastal regions are likely to cause increasing salinity of freshwater and groundwater resources for several reasons. As dry seasons are extended and sea levels rise, the occurrence of saline intrusion in freshwater sources become increasingly likely, bringing about significant health risks such as "hypertension" and increased likeliness of strokes.¹⁷⁴ This is particularly a key issue in Thailand, as drinking water became unhealthily salinized during last year's drought and water treatment plants were not equipped to desalinate drinking water. It is unclear whether this issue will be addressed Additionally, tropical cyclone surges are likely to further salinize groundwater sources in coastal areas.¹⁷⁵ Compounded with increasing soil salinity and increasing water scarcity, the salinisation of freshwater will

¹⁷⁴ Paolo Vineis, Queenie Chan and Aneire Khan, "Climate Change Impacts On Water Salinity And Health", *Journal Of Epidemiology And Global Health* 1, no. 1 (2011): 5, doi:10.1016/j.jegh.2011.09.001.

¹⁷⁵ John Weiss, "The Economics Of Climate Change In Southeast Asia: A Regional Review" (repr., Asian Development Bank, 2009).

significantly reduce agricultural productivity within the Mekong delta, dramatically affecting many livelihoods of Thai farmers.

The 20 Year Master Plan for Water Resource Management (2018 - 2037) (UEUUI/jo) OF/IDOFS ODOISED IDO20 -Â(O.ý. 2561 - 2580)) addresses the issue of water salinity in a short-term and long-term manner. In the short-term, the Plan's solution to saltwater intrusion in river deltas is to release a large amount of water from upstream dams and reservoirs in order to push saltwater back out into the ocean. The primary challenge to the solution is its unsustainability: as water becomes increasingly scarce due to extended dry seasons and hotter temperatures, water available in dams and reservoirs for household consumption and agricultural usage becomes reduced. In January of 2021, approximately 2 billion cubic meters of water was released from various reservoirs to bring water salination back to safe levels.¹⁷⁶ The capacity to release such a large amount of water becomes diminished as Thailand becomes increasingly impacted by climate change. In the long term, the Plan aims to tackle the issue of water salinity through increasing the capacity and quality of wastewater treatment, reducing the amount of wastewater is released from the industrial and tourism sector into freshwater sources, and recovering rivers and canals to ensure a balanced ecosystem. However, these aims are vague, without performance measures, and without a clear roadmap detailing how these aims would be achieved. To give the NWRC the benefit of the doubt, the organisation and its relevant agencies remain preoccupied with structural issues. With an increased budget in the post-COVID era and a fully operational taskforce, their ability to mitigate climate change risks may improve. Nevertheless, although the Plan is set to be revised every 5 years, experience has shown that the negotiation process, particularly surrounding sensitive issues, takes a significant amount of time and that implementation of these plans are likely to be subjected to delays.

¹⁷⁶ Nipon Paopongsakorn (Distinguished Fellow/Acting Program Director Sectoral Economic

Program, Thailand Development Research Institute Foundation), interviewed by the author, March 2021

Therefore, while the onset of climate change is relatively incremental, the likely situation is that the NWRC will be implementing measures with a time-lag.

That said, it would be premature as well as naïve to suggest that my answer to the government's ability to mitigate risks of climate change is sufficient here. As a brief exploration to create a broad understanding, I believe that this section has shed light on some very preliminary understandings of the capabilities at hand and the risks that may be faced. The question of water security, the preparedness and adequacy of the NWRC and its associated agencies, and the risks associated with climate change warrants further and deeper research and exploration. I believe that this is a research question that is worth exploring on its own.

Concluding Remarks

Over the past several decades, Thailand's water governance has been short of satisfactory, given the fragmentation and inefficiencies at various levels of governance. These shortcomings largely stem from two things: horizontal and vertical fragmentation. Horizontal fragmentation has largely referred to the scattered responsibility of water governance across various agencies at different levels of governance, often with very narrow mandates that still manage to overlap with each other. Communication and coordination between these agencies are also minimal, further scattering the directionless governance of water resources.¹⁷⁷ Simultaneously, this governance also suffers vertical fragmentation whereby the management of water resources lacks an overarching governing body that integrates provides direction and unity. Following the Decentralisation Act, attempts at devolving power from the central government to regional and local levels have also been incomplete and unsustainable.¹⁷⁸ These shortcomings have been heavily researched over the past decade with many pointing the finger at the need for an overarching law as the solution to these woes by creating a national organisation dedicated to the governance of water resources and providing legal authority and support necessary to these agencies.

If this is true, why has it taken decades for the Water Resources Bill to be ratified? Given the plethora of evidence suggesting the Bill to the be missing piece in Thailand's water governance, one would think that it would be ratified earlier. I have therefore argued that political polarisation in Thai society has led to such delay and posed a constant challenge to its

¹⁷⁷ D. Nikomborirak and K. Ruengthip, "History of Water Resource and Flood Management in Thailand," (2013), TDRI olicy Brief.;

Francesca Franzetti, Alessandro Pezzoli, and Marco Bagliani, "Rethinking Water Resources Management Under a Climate Change Perspective: From National to Local Level. The Case of Thailand," in *Renewing Local Planning to Face Climate Change in the Tropics*, ed. Maurizio Tiepolo, Alessandro Pezzoli, and Vieri Tarchiani (Cham: Springer International Publishing, 2017).

¹⁷⁸ Danny Marks and Louis Lebel, "Disaster governance and the scalar politics of incomplete decentralization: Fragmented and contested responses to the 2011 floods in Central Thailand," *Habitat International* 52 (2016).;

Andreas Neef, "Lost in translation : The participatory imperative and local water governance in north Thailand and southwest Germany," *Water Alternatives* 1, no. 1 (2008).;

ratification. Modern Thai society has been divided along socio-economic cleavages since the latter half of the 20th century and these two factions have evolved over time, both in ideology and personification.¹⁷⁹ On one end lies the political and economic elite, consisting of the old oligarchy and the network monarchy and is often supported by the urban middle class. This faction works to preserve the status quo – a hierarchical and paternalistic society that places the monarchy as the moral authority of the country.¹⁸⁰ At the other end lies those who seek to change the status quo and the people at this pole have evolved significantly over time; following the turn of the century, the personification this pole was Thaksin Shinawatra who had enfranchised the rural populations by dramatically increasing their social mobility.¹⁸¹

The pervasiveness of political polarisation in the fabric of Thai social and political spheres between these two factions has prevented the ratification of this Bill and its impact in the water governance sphere has often been overlooked in existing literature. While not obvious at first, I have argued that polarisation of Thai society over the past decades has been the crucial obstacle in three major ways: its interruption of legislative procedures, the desire to shape the Bill in a way that is moulded by the faction's ideology, and the inability of key agents on opposing poles to compromise. The ratification of the Bill in 2018 was no coincidence and is consistent with the argument I have made here. The coup in 2014 was different to previous one, such that it had the full endorsement of the monarchy, so much so that the junta was able to comfortably say that the military will stay indefinitely.¹⁸² As such, the previous challenges that political polarisation had posed to the legislative process was temporarily suspended, even if the tensions continued to remain high outside of the policymaking sphere. With unlimited time

¹⁷⁹ Winichakul, "The Monarchy And Anti-Monarchy: Two Elephants In The Room Of Thai Politics And The State Of Denial",

¹⁸⁰ *ibid*

¹⁸¹ Sombatpoonsiri, "Two Thailands: Clashing Political Orders And Entrenched Polarization"

¹⁸² Fuller, "After Coup, General Vows To Create A 'Genuine Democracy' In Thailand

and no opposition, the military government was able to revise the draft that perpetuated the status quo and ratify the Act with little difficulty.

Finally, with the ratification of the Water Resources Act, this thesis would be incomplete without assessing its ability to resolve governance issues as many scholars have suggested. I have argued that, three years on, it is still too early to tell but it has significant potential dramatically reduce issues of fragmentation through the organisational reforms it is implementing. However, there are many challenges for the National Water Resources Commission in reaching this potential, including the negotiation surrounding sensitive issues as well as the COVID-19 pandemic. In light of climate change concerns and the extent of the risks that Southeast Asia faces, particularly storm surges, increasing water salinity, and severe droughts, I have also discussed whether the Act is equipped to mitigate these risks. I have argued that Act is sufficient for now, but as the risks increase in severity and probability, the National Water Resources Commission and relevant organisations will have to be more innovative and thorough in its risk mitigation and adaptation strategies. However, my assessment in this regard is quite broad-based and surface-level. I believe that this question warrants further and deeper consideration, as its potential as a research question on its own remains quite large. Further research on this aspect may evaluate water security and risk mitigation capabilities given the existing available resources and personnel. In taking this deeper, a scenario analysis may be an appropriate measure given the uncertainty surrounding the global trajectory of climate action.

Policy Implications

There are several overarching policy implications and broad-based recommendations that can be made from this research. First, while the Water Resources Act is a step in the right direction in alleviating the issue of "too much water, too little water", its emphasis has largely been supply-side management. It has been noted that water demand – which is increasing

annually – exceeds the readily available supply of water.¹⁸³ Additionally, as the impact of climate change is further exacerbated, the supply of water becomes far less secure. Consequently, a policy avenue that may prove fruitful is the exploration of effective demand side management policies. For instance, the investment in water reuse and water reuse financing could prove to be fruitful: agriculture plays a significant role in Thai livelihoods and GDP while, globally, most of the reused waters serves in agricultural production.¹⁸⁴ Although water reuse has been practiced by Thai farmers on an ad-hoc basis, the formalisation of such reuse where the process is supported by appropriate technical and legislative instruments, as well as treatment and distribution mechanisms, would enhance the potential and effectiveness of water reuse in the agricultural sector.

Secondly, and relatedly, the issue of "too much water" has been a point of contentious debate amongst politicians, academics, and bureaucrats – and a particular point of grievance for citizens. The establishment of a central overarching governing authority, such as the National Water Resources Commission, provides an opportunity to pursue integrated flood management policies at all levels of governance, especially with regards to proactive mitigation and preparation for both short-term and long-term flood risk reduction. For instance, policies establishing and standardising data collection methods and database creations for floodplain management, and "mapping of risk magnitudes in relation to land use changes" would be beneficial not only for risk mitigation but also for monitoring and evaluating flood management mechanisms.¹⁸⁵ This integration of local, regional, and national water governance could thus provide an avenue for co-ordinated land use planning, particularly with regard to enforcement of policies and regulations. Nevertheless, the politicisation of land-use – especially in regard to land price, electoral gains, and patronage opportunities – should not be understated. Another

¹⁸³ Takenori Inoki, "Personnel Exchange Among Central And Local Governments In Japan", World Bank Institute, 2001.

¹⁸⁴ Jonathan Lautze et al., "Global Experiences In Water Reuse", Resource Recovery & Reuse Series 4 (repr., IWMI, 2014).

¹⁸⁵ Nuanchan Singkran, "Flood Risk Management In Thailand: Shifting From A Passive To A Progressive

Paradigm", International Journal Of Disaster Risk Reduction 25 (2017): 92-100, doi:10.1016/j.ijdrr.2017.08.003.

policy endeavour that should be explored is the catchment of stormwater in urban areas – the current treatment of stormwater has been found to perpetuate issues of water quality degradation while contributing to flood risk.¹⁸⁶ Policies encouraging catchment at household levels, such as green roofs,¹⁸⁷ and neighbourhood levels could reduce flood and pollution concerns surrounding runoffs.

Finally, and perhaps briefly, I want to address the capacity building and capacity shortage of the National Water Resources Commission and the agencies operating within its jurisdiction, as well as, more broadly, knowledge-sharing and enhancement of inter-agency communication. Particularly, the possibility of conducting personnel exchanges between government departments should be considered. In Japan, personnel transfers or loans occurs between central government to local government units with a specified length and conditions of placement. The exchange at the central and local level can also be directly related to a specific policy's implementation, in which the close cooperation of central and local levels of government are required. In doing so, the sharing of knowledge and skills required in this particular field can occur efficiently between personnel of different levels.¹⁸⁸ In Thailand, it would be interesting to pursue, either in terms of feasibility studies or a qualitative endeavour, the plausibility of piloting such personnel exchange, especially between departments with similar or overlapping responsibilities. Specifically, knowledge and skills sharing between the Royal Irrigation Department, the Department of Water Resources, and personnel under the NWRC/ONWR should provide to enhance the efficiency and effectiveness of operations, especially as this open communication would reduce the likelihood of conflict over jurisdiction and repetition or gaps in governance.

¹⁸⁶ Chayanun Maneewan and Marjorie Van Roon, "Challenges In Implementing Integrated Catchment Management And Sustainable Stormwater Solutions In Bangkok, Thailand", *Water Practice And Technology* 12, no. 4 (2017): 780-789, doi:10.2166/wpt.2017.085.

¹⁸⁷ Ibid.

¹⁸⁸ Inoki, "Personnel Exchange Among Central And Local Governments In Japan"

There are several, more general, implications that I would like to shed light on. First, I believe that this thesis can start a conversation exploring the nexus between a society's sociopolitical context and the relationship it has with the largely bureaucratic policy-making domain, especially in policy spheres where the influence of society and politics is often overlooked. As mentioned previously, there is a plethora of work written about the socio-political environment in Thailand and the challenges in water governance in Thailand but there lacks a bridge between the two when, in actuality, socio-political contexts and policymaking spaces inform and influence each other. In terms of its applicability in the broader scholarship, this conversation could be ignited in other emerging economies with destabilising political statuses and a shortcoming of effective natural resources governance. Second, and specific to Thailand, it could be an opportunity to further research whether the relationship between political polarisation of society and the governance of water resources continues to hold even after the ratification of the Act and the establishment of relevant government bodies, and, if so, how the pervasiveness of political polarisation manifests itself in this new context. Moreover, to assess whether this relationship holds in other policy spaces with similar stakes, such as in land management or forestry management. Finally, it would be worth looking forward and assessing in depth the capacity for Thailand's reforming governance bodies in addressing, mitigating, and adapting to various climate change risks in various global scenarios.

<u>Appendix</u>

Appendix 1. Translated Table of the 30 Organic Laws following the Water Resources Act, B.E. 2564, the Responsible Agency, and its Progress as of April, 08 2021.

No.	Name of Supplementary Law	Responsible Agency	Progress	Notes
1	Royal Decree Designating Watersheds, B.E. 2564	Office of the Prime Minister	Published in the Royal Gazette Volume 137, Section 12 A, on February 11, 2021	
2	Ministerial Regulation on Selection of Committee Representatives of the Water Basin Committee in the National Water Resources Commission, B.E. 2564	Office of the Prime Minister	Published in the Royal Gazette Volume 138, Section 8 A, on February 12, 2021	
3	Ministerial Regulations on the Acquisition of Drainage Basin Committee Members, Representative of Local Governments, Representative of Water User Bodies and Expert Committee Members Into the Drainage Basin Committee, B.E. 2564	Office of the Prime Minister	Published in the Royal Gazette Volume 138, Section 8 A, on February 12, 2021	
4	Ministerial Regulations on the Vacation of Office Positions for Drainage Basin Committees and Water User Bodies Due to Ineffective or Dishonest Performance of their Duties, B.E. 2564	Office of the Prime Minister	Published in the Royal Gazette Volume 138, Section 9 A, on February 5, 2021	
5	Ministerial Regulations on Water User Bodies, B.E	Office of the Prime Minister	Published in the Royal Gazette Volume 138, Section 8 A, on February 2, 2021	
6	Draft Ministerial Regulation Specifying Water Usages of Type One, Type Two, and Type Three Users, B.E	Office of the Prime Minister	In Progress	
7	Draft Ministerial Regulations on Rules, Procedures, and Conditions for License Application, Validity, Renewal, Transfers, and Substitutes for Type Two and Type Three Water License, B.E	Ministry of Agriculture and Cooperatives, and Ministry of Natural Resources and Environment	In Progress	
8	Draft Ministerial Regulations to Determine the Rate for Type Two and Type Three Water Usage Licenses Fees, B.E	Office of the Prime Minister	In Progress	
9	Draft Ministerial Regulations on Rules and Regulations for Determining Water Usage Rates for Type Two and Type Three Usage, Including Criteria, Methods, and Conditions for Collection, Reduction, or Waiving of Fees, B.E	Office of the Prime Minister	In Progress	
10	Draft Ministerial Regulations to Determine the Rates for The Use of Type Two and Type Three Water Usage Beyond Groundwater under the Groundwater Act and Beyond Irrigated Water under the Irrigation Act, B.E	Ministry of Natural Resources and Environment	In Progress	
11	Draft Ministerial Regulations on Rules and Procedures for Allocating Compensation to Persons who Privately Capture and Store Water to Reduce Impact of Consumption Shortages in the Area, B.E	Office of the Prime Minister	Under Consideration of the Office of the Council of State	
12	Draft Ministerial Regulations on Rules and Procedures for Compensation for Damages to the Owner or Occupier of Land or Construction Equipment from Prevention and Resolution Measures of Droughts and Floods, B.E	Office of the Prime Minister	Under Consideration of the Office of the Council of State	

13	Draft Ministerial Regulation on Rules and Procedures	Office of the Prime Minister	Under Consideration of the	
10	to Determine Compensation of Land Use or		Office of the Council of State	
	Construction Equipment and Compensation for			
	Property Damages of the Owner or Occupant of the			
	Land or Construction Equipment from Prevention			
	and Resolution Measures of Droughts and Floods,			
	B.E			
14	Draft Ministerial Regulations on Rules and	Ministry of Interior	In Progress	
	Procedures for Land Use that May Affect Public			
	Water Resources, B.E			
15	Draft Ministerial Regulations on Criteria and	Ministry of Interior	In Progress	
	Procedures for Determining Compensation for Lack			
	of Land Use and / or Compensation for Damages			
	Resulting from the Execution of the Order to Alter or			
	Suspend the Use of Land, B.E			
16	Draft Ministerial Regulations on Rules and	Ministry of Natural Resources	In Progress	
	Procedures for Conservation and Development of	and Environment		
17	Public Water Resources, B.E	National Water Resources	Duklick - J in the D 1	
17	Regulation of the National Water Resources Commission on Measures to Promote and Support the	National Water Resources Commission	Published in the Royal Gazette Volume 138, Special	
	Private Sector, Civil Society and Related	Commission	Section 24 D, on February 2,	
	Communities Participating in Water Resource		2021	
	Management B.E. 2564		2021	
18	Draft Regulations from the Prime Minister's Office	Office of the Prime Minister	Under Consideration of the	
	Regarding the Rules and Procedures for Placement of		Office of the Council of State	
	Compensation for Damages to the Judicial Courts,			
	the Deposit Office, or a Savings Bank and Methods			
	of Receiving Compensation for Damages, B.E			
19	Draft Announcement of the National Water	Office of National Water	In Progress	
	Resources Commission on the Establishment of	Resources		
	Water Charts, B.E			
20	Announcement of the National Water Resources	Office of National Water	Published in the Royal	
	Commission on the Guidelines for Determining	Resources	Gazette Volume 138, Special	
	Criteria for the Use of Public Water Resources by		Section 24 D, on February 2,	
	Government Agencies or Local Government		2021	
01	Organizations			
21	Announcement of the National Water Resources	Office of National Water	Published in the Royal	
	Commission on the Framework of the	Resources	Gazette Volume 138, Special	
	Responsibilities of the Drainage Basin Committees		Section 24 D, on February 2,	
	and Priorities of Various Water Activities, B.E. 2564		2021	
22	Announcement of the National Water Resources	Office of National Water	Published in the Royal	
	Commission Regarding Criteria and Procedures for	Resources	Gazette Volume 138, Special	
	Submission of Grievances or Disputes, Mediation and		Section 24 D, on February 2,	
	Conflict Resolution Between Drainage Basin		2021	
	Committees, B.E. 2564			
23	Announcement of the National Water Resources	Office of National Water	Published in the Royal	
	Commission on the Criteria and Framework on	Resources	Gazette Volume 138, Special	
	Public Consultations in the Formulation of Policy and		Section 24 D, on February 2,	
	Plans Related to Water Resources Management B.E.		2021	
	2564			
24	Announcement of the National Water Resources	Office of National Water	Published in the Royal	
	Commission Regarding Criteria and Procedures for	Resources	Gazette Volume 138, Special	
	Submission of Grievances or Disputes, Mediation and		Section 24 D, on February 2,	
	Conflict Resolution Between Water Users, B.E. 2564		2021	
25	Announcement of the National Water Resources	Office of National Water	Published in the Royal	
1	Commission on Guidelines for Flood Risk	Resources	Gazette Volume 138, Special	

	Management and the Formulation of the Flood Warning System, B.E. 2564		Section 24 D, on February 2, 2021	
26	Announcement of the Office of the Prime Minister, Ministry of Agriculture and Cooperatives, Ministry of Natural Resources and Environment, and Ministry of Interior on Identification Card for Employees and Officials, B.E. 2563	Office of the Prime Minister, Ministry of Agriculture and Cooperatives, Ministry of Natural Resources and Environment, and Ministry of Interior	Published in the Royal Gazette, Volume 137, Special Section 251 D, on October 27, 2020.	
27	Announcement of the Office of the Prime Minister on criteria and procedures for the settlement committee under the Water Resources Act B.E. 2561 BE 2564	Office of the Prime Minister	Published in the Royal Gazette, Volume 138, Special Section 34 D, on February 11, 2021.	
28	Draft Announcement of the National Water Resources Commission on rules, procedures and conditions for government agencies or local government organizations to prepare water consumption data for Type One users in areas under their responsibility B.E	National Water Resources Commission	In Progress	
29	Draft Notification of the Royal Irrigation Department, Department of Water Resources, and Department of Groundwater Resources on the application form for a water usage license and water management plan B.E	Royal Irrigation Department. Department of Water Resources, Department of Groundwater Resources (Depending on the case)	In Progress	
30	The draft announcement of the Royal Irrigation Department, Department of Water, and Department of Groundwater Resources on criteria and methods for granting licenses on water usage, installation of instruments to measure water usage, and to collect data for official evaluations B.E	Royal Irrigation Department. Department of Water Resources, Department of Groundwater Resources (Depending on the case)	In Progress	

Appendix 2. Original and Untranslated Table of the 30 Organic Laws following the Water Resources Act, B.E. 2564, the Responsible Agency, and its Progress as of April, 08 2021

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References

- Asian Development Bank. 2001. " 3260-THA: Capacity Building in the Water Sector." TA Completion Report.
- Bangkok Post, 2011. Splash From the Past. [online]. Available at: https://www.bangkokpost.com/photo/262533/splash-from-the-past [Accessed 15 March 2021].
- —. 2018. "Thailand Tackles Worst Drought in 40 Years." https://www.bangkokpost.com/business/1853069/nation-tackles-worst-drought-in-40-years.
- Bangprapa, Mongkol. "Complete End To Lockdown On July 1". Bangkok Post. https://www.bangkokpost.com/business/1925768/complete-end-to-lockdown-on-july-1.
- Bhaopichitr, Kirida. "Thailand's Economic Outlook For 2021". TDRI: Thailand Development Research Institute, 2020. <u>https://tdri.or.th/en/2020/12/thailands-economic-outlook-for-2021/</u>
- Branigan, Tania. 2011. Thai army 'will not challenge' Yingluck Shinawatra Coalition.
- Cox, Kevin R. 1997. "Spaces of dependence, spaces of engagement, and the politics of scale, or: looking for local politics." *Political Geography* 1-23.
- -. 2004. " IFOILIOF & IO. ý [Draft Water Resources Act]"
- -. 2007. " IFOILIGE & IO. ý [Draft Water Resources Act]"
- -. 2013. " IFOILIOF & LOR [Draft Water Resources Act]"
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- Dufhues, Thomas, Insa Theesfeld, and Gertrud Buchenrieder. 2015. "The Political Economy of Decentralization in Thailand: How Past and Present Decentralization Affects Rural Actors' Participation." *European Journal of Development Research* 793-810.
- Earth, Down To. 2020. "Water Supplies Dry Up As Thailand Reels Under Worst Drought In Decades." Down To Earth. https://www.downtoearth.org.in/news/climate-change/water-supplies-dry-up-as-thailand-reels-under-worst-drought-in-decades-69333.
- n.d. "English Translation of "Determing Plans and Process of Decentralization to Local Government Organization Act, B.E. 2542 (1999)"." Bangkok. http://thailaws.com/law/t laws/tlaw0070 6.pdf.

Engvall, Anders. 2006. "Political Polarization in Thailand." Poverty and Conflict in Southeast Asia.

- Estaban, Joan, and Debraj Ray. 1994. "On the Measurement of Polarization." *Econometric Society* 62 (4): 819-851.
- Faulder, Dominic. 2017. *Thailand in 1992: The black days of May.* 20 May. https://asia.nikkei.com/Politics/Thailand-in-1992-The-black-days-of-May.
- Franzetti, Francesca, Alessandro Pezzoli, and Marco Bagliani. 2017. "Rethinking Water Resources Management Under a Climate Change Perspective: From National to Local Level. The Case of Thailand." In *Renewing Local Planning to Face Climate Change in the Tropics*, by Maurizio Tiepolo, Alessandro Pezzoli and Vieri Tarchiani, 169-195. Cham: Springer International Publishing.
- Fuller, Thomas. "After Coup, General Vows To Create A 'Genuine Democracy' In Thailand (Published 2014)". The New York Times, 2014. https://www.nytimes.com/2014/05/27/world/asia/thailand.html.
- Funatsu, Tsuruyo. 2014. "Organizational Reformation of Water Resources Management in Thailand: "The 2011 Thailand Great Floods" and endless reforms." In *Politics of the Environment - the formation of "late-comer" Public Policy*, by Tadayoshi Terao. Chiba: Institute of Developing Economies.
- Hewison, Kevin. 2010. "Thaksin Shinawatra and the reshaping of Thai politics." *Contemporary Politics* 119-133.
- Hicken, Allen. 2010. "Phak or Phuak? The Questionable Development of Partisan Identity in Thailand." *APSA 2010 Annual Meeting Paper*.
- Houdret, Annabelle, Ines Dombrowsky, and Lena Horlemann. 2015. "The Institutionalization of River Basin Management as Politics of Scale Insights from Mongolia." *Journal of Hydrology* 2392-2404.
- Hukka, J. J., J. E. Castro, and P. E. Pietil. 2010. "Water Policy and Governance." *Environment and History* 235-251.
- Inoki, Takenori. "Personnel Exchange Among Central And Local Governments In Japan". *World Bank Institute*, 2001.
- Jarernpanit, Thannapat. 2019. "The Contestation of "Good Politics": Explaining Conflict and Polarisation in Thailand." *Asian Studies Review* 43 (4): 657-673.
- Jitnathum, Amarin. "Thailand Economic Monitor January 2021: Restoring Incomes; Recovering Jobs". World Bank, 2021. <u>https://www.worldbank.org/en/country/thailand/publication/key-findings-thailand-economic-monitor-january-2021-restoring-incomes-recovering-jobs</u>
- Khunkitti, Suwit. 2019. "An Institutional Perspective on Water Sector Performance in Thailand." Doctor of Philosophy Thesis. Faculty of Engineering and Information Technology, University of Technology Sydney.
- Kongkirati, Prajak. 2018. "From Illiberal Democracy to Military Authoritarianism: Intra-Elite Struggle and Mass-Based Conflict in Deeply Polarized Thailand." *The ANNALS of the American Academy of Political and Social Science* 24-40.
- Kongkirati, Prajak. 2014. "The Rise and Fall of Electoral Violence in Thailand: Changing Rules, Structures, and Power Landscapes." *Contemporary Southeast Asia* 386-416.

- Lan, Mai. 2016. "Diverting The Mekong River Into Thailand: The Khong-Loei-Chi-Mun Project -Mekong Eye". *Mekong Eye*. https://www.mekongeye.com/2016/06/07/diverting-the-mekongriver-into-thailand-the-khong-loei-chi-mun-project/.
- Lautze, Jonathan, Emilie Stander, Pay Drechsel, Allegra K. da Silva, and Bernard Keraita. "Global Experiences In Water Reuse". *Resource Recovery & Reuse Series 4*. Reprint, IWMI, 2014.
- Loucks, Daniel P., and Eelco van Beek. "Water Resources Planning And Management: An Overview". In Water Resource Systems Planning And Management, 1-49. Daniel P. Loucks and Eelco van Beek. Reprint, Springer, Cham, 2017. https://doi.org/10.1007/978-3-319-44234-1 1.
- Lundqvist, Lennart J. 2018. "'Nested enterprises'? Spatial dimensions of ecological governance." In *Sweden and ecological governance*, by Lennart J. Lundqvist, 25-53.
- Maneewan, Chayanun, and Marjorie Van Roon. "Challenges In Implementing Integrated Catchment Management And Sustainable Stormwater Solutions In Bangkok, Thailand". *Water Practice And Technology* 12, no. 4 (2017): 780-789. doi:10.2166/wpt.2017.085.
- Marks, Danny, and Louis Lebel. 2016. "Disaster governance and the scalar politics of incomplete decentralization: Fragmented and contested responses to the 2011 floods in Central Thailand." *Habitat International* 57-66.
- Marston, Sallie A. 2000. "The social construction of scale." Progress in Human Geography 219-242.
- McCargo, Duncan. 2003. "Balancing the Checks: Thailand's Paralyzed Politics Post-1997." Journal of East Asian Studies 129-152.
- McCargo, Duncan. 2005. "Network Monarchy and Legitimacy Crises in Thailand." *The Pacific Review* 18 (4): 499-519.
- Molle, Francois, and Philippe Floch. 2008. "Megaprojects and Social and Environmental Changes: The Case of the Thai "Water Grid"." *AMBIO A Journal of the Human Environment* 199-204.
- National Research Council. 1994. "IPOU, açtucitation, at a conservation of a Master Law for the Use and Conservation of Water Resources]."
 - Bangkok.
- Neef, Andreas. 2008. "Lost in Translation: The Participatory Imperative and Local Water Governance in North Thailand and Southwest Germany." *Water Alternatives* 89-110.
- Neumann, Roderick P. 2009. "Political ecology: theorizing scale." *Progress in Human Geography* 398-406.
- Nikomborirak, D., and K. Ruengthip. 2013. "History of Water Resource and Flood Management in Thailand ." *TDRI Policy Brief.*
- Nikomborirak, Duenden. 2016. Climate Change and Institutional Challenges for Developing Countries: The Case of Water Resource Management in Thailand. TDRI Research Report.
- OFFENCES RELATING TO THE SECURITY OF THE KINGDOM, 112. Insulting or Defaming Royal Family § (n.d.).

[Summary of Deliberations Made According to Relevant Agencies on the Water Resources Bill]." September.

- Office of the Council of the State. n.d. "Unofficial Translation Constitution of the Kingdom of Thailand B.E. 2560." https://www.constitutionalcourt.or.th/occ_en/download/article_20170410173022.pdf.
- Paopongsakorn, Nipon, and Pitsom Meethom. 2013. "Impact of the 2011 Floods and Flood management in Thailand." *ERIA Discussion Paper Series*.
- Pongsudhirak, Thitinan. 2008. "Thailand Since the Coup." Journal of Democracy 140-153.
- Post Today. 2011. "Õidide di tur $|\tilde{A}^a...-\dot{A}^a|$ \dot{S} \dot{G} \dot{G} \dot{G} \dot{A} \dot{A} \dot{S} \dot{G} \dot{G} \dot{A} $\dot{$
- Prakash, Amit. "Boiling Point". Finance & Development 55, no. 3 (2018): 22-26.
- Reuters Staff. 2019. *Timeline: Thailand's turbulent politics over two decades*. 22 March. https://www.reuters.com/article/us-thailand-election-timeline-idUSKCN1R30HR.
- Rodrik, Dani. 2014. "When Ideas Trump Interests: Preferences, Worldviews, and Policy Innovations." Journal of Economic Perspectives 189-208.
- Rogers, Peter, and Alan Hall. 2003. Effective Water Governance. Global Water PArtnership.
- Sarni, Willi. "The Myth Of Day Zero: What We Got Wrong With Water". Eco-Business, 2020. https://www.eco-business.com/opinion/the-myth-of-day-zero-what-we-got-wrong-withwater/.Draft Water Resources Act]"
- Satrusayang, Cod. 2020. "Water Levels In Lower Mekong Basin At Historic Lows Despite The Onset Of The Rainy Season". Thai Enquirer. https://www.thaienquirer.com/14589/water-levels-inlower-mekong-basin-at-historic-lows-despite-the-onset-of-the-rainy-season/.
- ---. 2021. A Brief Oral History of the 2014 Military Coup. 22 May. https://www.thaienquirer.com/13394/a-brief-oral-history-of-the-2014-military-coup/.
- Shatkin, Gavin. 2004. "Globalization and Local Leadership: Growth, Power and Politics in Thailand's Eastern Seaboard." *International Journal of Urban and Regional Research* 11-26.
- Singkran, Nuanchan. "Flood Risk Management In Thailand: Shifting From A Passive To A Progressive Paradigm". *International Journal Of Disaster Risk Reduction* 25 (2017): 92-100. doi:10.1016/j.ijdrr.2017.08.003.
- Sneddon, Chris. 2003. "Reconfiguring scale and power: the Khong-Chi-Mun project in northeast Thailand." *Environment and Planning* 2229-2250.
- Sombatpoonsiri, Janjira. 2020. "Two Thailands: Clashing Political Orders and Entrenched Polarization." In *Political Polarization in South and Southeast Asia: Old Divisions, New Dangers*, by Thomas Carothers and Andrew O'Donohue, 67-80. Carnegie Endowment for International Peace.
- Sombatpoonsiri, Janjira. 2020. "Two Thailands: Clashing Political Orders and Entrenched Polarization." In *Political Polarization in South and Southeast Asia: Old Divisions, New Dangers*, by Thomas Carothers and Andrew O'Donohue, 67-80. Carnagie Endowment for International Peace.

- Sowcharoensuk, Chaiwat. 2020. "Severe drought: Agriculture sector takes direct hit and spillover effects on manufacturing supply chains." Krungsri Research Intelligence. https://www.krungsri.com/en/research/research-intelligence/RI-Drought.
- Suong, Thu. 2016. "Mekong Basin Stirs Up Region: Thai Water Diversion Project Could Have Mega Risks". *Earth Journalism Network*. https://earthjournalism.net/stories/mekong-basin-stirs-upregion-thai-water-diversion-project-could-have-mega-risks
- "Thailand: Angus Reid Global Monitor", Angus Reid, 2005, https://web.archive.org/web/20061015164045/http://www.angusreid.com/tracker/index.cfm?fuseaction=viewItem&itemID=5271.
- Thairath Online. 2011. "ừ tế TếT Xĩ Sử TÂN Sử TÂN THAIRA CU 2526-2538".

https://www.thairath.co.th/content/210756.

- Thanthong-Knight, Randy. 2020. "Drought-Hit Thai Sugar Sector 'Relieved' By Return of Rainfall." Bloomberg Green. https://www.bloomberg.com/news/articles/2020-08-06/drought-hit-thaisugar-sector-relieved-by-return-of-rainfall.
- Unger, Daniel H., and Patcharee Siroros. 2011. "Trying to Make Decisions Stick: Natural Resource Policy Making in Thailand." *Journal of Contemporary Asia* 206-228.
- United Nations Department of Humanitarian Affairs. 1995. "Thailand Floods Information Report No.1 Situation Report". https://reliefweb.int/report/thailand/thailand-floods-informationreport-no1.
- Vineis, Paolo, Queenie Chan, and Aneire Khan. "Climate Change Impacts On Water Salinity And Health". *Journal Of Epidemiology And Global Health* 1, no. 1 (2011): 5. doi:10.1016/j.jegh.2011.09.001.
- Visvanathan, C., and A. Cippe. "Strategies For Development Of Industrial Wastewater Reuse In Thailand". *Water Science And Technology* 43, no. 10 (2001): 59-66. doi:10.2166/wst.2001.0580.
- Wangkiat, Paritta. "Strong Cities Needed". Bangkok Post, 2018. https://www.bangkokpost.com/thailand/special-reports/1503802/strong-cities-needed.
- "Water Stress To Affect 52% Of World'S Population By 2050". Water Footprint Network, 2014. https://waterfootprint.org/en/about-us/news/news/water-stress-affect-52-worlds-population-2050/#:~:text=Some%2052%20percent%20of%20the,by%202050%2C%20MIT%20researchers%20sa y.&text=affect%20water%20stress.-,Some%2052%20percent%20of%20the%20world's%20projected %209.7%20billion%20people,by%202050%2C%20MIT%20researchers%20say.
- Weiss, John. "The Economics Of Climate Change In Southeast Asia: A Regional Review". Reprint, Asian Development Bank, 2009Wilson, Nicole J., Leila, M. Harris, Joanne Nelson, and Sameer H. Shah. 2019. "Re-Theorizing Politics in Water Governance." *Water* 1470.
- Winichakul, Thongchai. 2016. *Thailand's Hyper-Royalism: Its Past Success and Present Predicament*. ISEAS-Yusof Ishak Institute.
- Winichakul, Thongchai. 2014. "The Monarchy and Anti-Monarchy: Two Elephants in the Room of Thai Politics and The State of Denial." In *Good Coup Gone Bad: Thailand's Political Development Since Thaksin's Downfall*, by Pavin Chachavalpongpun, 79-108. ISEAS-Yusof Ishak Institute.

- Yi, Hongtao, and Can Cui. 2018. "Coping with functional collective action dilemma: functional fragmentation and administrative integration." *Public Management Review*.
- Zwarteveen, Margreet, Jeltsje Kemerink-Seyoum, Michelle Kooy, Jaap Evers, Tatiana Acevedo Guerrero, Bosman Batubara, Adriano Biza, et al. 2017. "Engaging with the Politics of Water Governance: Engaging in Water Governance Discussions." *Wiley Interdisciplinary Reviews: Water*.