

Washington International Law Journal

Volume 20 | Number 2

3-1-2011

Incentives for Change: China's Cadre System Applied to Water Quality

Wyatt F. Golding

Follow this and additional works at: <https://digitalcommons.law.uw.edu/wilj>

 Part of the [Comparative and Foreign Law Commons](#), and the [Environmental Law Commons](#)

Recommended Citation

Wyatt F. Golding, Comment, *Incentives for Change: China's Cadre System Applied to Water Quality*, 20 Pac. Rim L & Pol'y J. 399 (2011).

Available at: <https://digitalcommons.law.uw.edu/wilj/vol20/iss2/6>

This Comment is brought to you for free and open access by the Law Reviews and Journals at UW Law Digital Commons. It has been accepted for inclusion in Washington International Law Journal by an authorized editor of UW Law Digital Commons. For more information, please contact cnyberg@uw.edu.

INCENTIVES FOR CHANGE: CHINA'S CADRE SYSTEM APPLIED TO WATER QUALITY

Wyatt F. Golding[†]

Abstract: The Chinese government has struggled to enforce environmental law, due in part to local protectionism. In an attempt to overcome local protectionism, the 2008 Law on the Prevention and Control of Water Pollution uses the cadre system to incentivize local officials to enforce national water quality standards. This comment argues that the cadre system presents a pragmatic means of attaining enforcement of quantified environmental standards because it implements the already existing Chinese Communist Party's system of vertical hierarchy that has proven relatively successful in achieving other social goals. The cadre system, however, will only produce clean water over the long-term if it incentivizes political support and funding for environmental protection agencies to create accurate quantified water quality data. Moreover, China's use of the cadre system in combating water pollution signals a move toward a political rather than legal solution and will further centralize Chinese Communist Party power, thus limiting transparency, democracy, and public involvement.

I. INTRODUCTION

Until recently, it appeared that China would employ the judiciary to solve a deepening environmental crisis.¹ However, the Chinese government, under the leadership of the Central Communist Party ("CCP"), is moving away from rule of law towards a tighter embrace of political solutions.² To increase the accountability of political officials, the CCP employs an incentive structure, known as the cadre system, that functions as a market solution within a political context. This paper analyzes the history and context of the cadre system as employed in the 2008 amended version of the Law on the Prevention and Control of Water Pollution and argues that while the system as currently employed disenfranchises the Chinese people, it pragmatically applies the strongest governing force currently possible in China and has strong potential for achieving cleaner water. This paper also argues that the Communist Party should implement more public involvement in the cadre system, in order to broaden enforcement, involve citizens, and strengthen political support.

[†] J.D. Candidate at the University of Washington School of Law, Class of 2011. Many thanks to Professor Bill Rodgers, Professor Dongsheng Zang, Professor Carl Minzner, Amanda Maus, Albert Buchman, and Sarah Jordan for their support, insight, and editing.

¹ See Patti Goldman, *Public Interest Environmental Law in China: Lessons Learned from the U.S. Experience*, 8 VT. J. ENVTL. L. 251, 253 (2007).

² See generally Randall Peerenboom, *More Law, Less Courts: Legalized Governance Judicialization and Dejudicialization in China*, (La Trobe U. Sch. of L., Paper No. 2008/10), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1265147.

Environmental laws and legal enforcement have failed to meaningfully prevent water pollution in China. The National People's Congress of the People's Republic of China ("China") promulgated the Law on the Prevention and Control of Water Pollution ("LPCWP") in 1984,³ yet poor water quality continues to wreak significant economic, health, and ecological damage. In 1997, the World Bank calculated that damage from air and water pollution cost China fifty-four billion U.S. dollars annually, or eight percent of gross domestic product.⁴ Sixty percent of the surface water from sampling sites in the nation's seven major rivers is unfit for fishing or swimming,⁵ while over ninety percent of the groundwater in wells in eastern provinces is unsuitable for drinking.⁶ A steep decline in aquatic biodiversity captured the world's attention in 2006, when a six-week survey found that the Yangtze River dolphin, the "goddess of the Yangtze," had gone extinct due to water pollution.⁷

The critical question in the face of these failures is why China's regime of relatively developed⁸ environmental protection laws has been unsuccessful. Scholars widely agree that the primary answer is a principal-agent problem, dubbed local protectionism.⁹ There is a two-part cause to this widespread problem.¹⁰ First, legislation in China is generally aspirational and vague, and enforced within a legal system that lacks effective vertical hierarchy.¹¹ This legal context gives great enforcement discretion to local officials. Second, local officials exercise their

³ Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984), *available in English at* http://english.mep.gov.cn/Policies_Regulations/laws/environmental_laws/200710/t20071009_109915.htm (last visited Dec. 19, 2010).

⁴ WORLD BANK, CLEAR WATER, BLUE SKIES 23 (World Bank 1997).

⁵ WORLD BANK, ADDRESSING CHINA'S WATER SCARCITY: RECOMMENDATIONS FOR SELECTED WATER RESOURCE MANAGEMENT ISSUES 11 (World Bank 2009); *see also* The Asia Water Project: China, Water Crisis, <http://www.asiawaterproject.org/water-crises/water-facts/surface-water-pollution>.

⁶ *Id.*

⁷ Peter Ritter, *Farewell to the Yangtze River Dolphin*, TIME MAG., Aug. 10 2007, *available at* <http://www.time.com/time/health/article/0,8599,1651819,00.html>.

⁸ Richard J. Ferris, Jr., *Reaching Out to the Rule of Law: China's Continuing Efforts to Develop an Effective Environmental Law Regime*, 11 WM. & MARY BILL OF RTS. J. 569, 581 (2003). The author quotes a Chinese environmental protection official as saying "China has a wealth of laws with shallow roots." *Id.* at 588.

⁹ *Id.* (listing sources). Local protectionism has long been a problem in environmental enforcement in the United States, and spurred the growth of federal legislation and a developed national regulatory system. *See* PETER CLEARY YEAGER, THE LIMITS OF LAW: THE PUBLIC REGULATION OF PRIVATE POLLUTION 64 (Cambridge 1991); *see also* Carl F. Minzner, *Riots and Cover-ups: Counterproductive Control of Local Agents in China*, 31 U. PA. J. INT'L L. 53, 113 (2009).

¹⁰ Xin Qiu & Honglin Li, *Super Ministry Reform, Background, Challenges, and the Future*, 39 Env. L. Inst. 10152, 10160 (2009), *available at* www.epa.gov/ogc/china/xin.pdf (last visited Feb. 18, 2011).

¹¹ Benjamin van Rooij, *Implementation of Chinese Environmental Law: Regular Enforcement and Political Campaigns*, 37 DEVEL. & CHANGE 57, 60 (2006).

enforcement discretion to protect local economic interests rather than implementing national environmental legislative purposes.¹²

The Chinese government functions with two separate, but intertwined institutions: the government and the CCP. The CCP is a functionally unopposed political organization with selective membership that develops and places government officials. The cadre system is a means of documenting and incentivizing attainment of goals by CCP officials. Higher-level officials attach personal, political, and monetary accountability to water quality attainment by tying attainment of goals to individual party members' or cadres' success within the CCP and to monetary rewards. The cadre system also establishes joint and several liability for failures. In this system, local officials must take whatever measures necessary to meet nationalized standards in order to retain and increase their political stature. In 2008, the National People's Congress Standing Committee attempted to eliminate the negative effects of local protectionism on water quality by implementing the cadre system, outlined in Article Five of the LPCWP.¹³

Use of the cadre system is attractive because applying strict and joint liability within an existing vertical structure simplifies oversight and allows local flexibility in the method used to attain concrete goals. However, because of the complexity of water quality attainment and economic tradeoffs, the cadre system alone will produce reactionary, short-term results. Sustainable water quality will be meaningfully attained only to the extent that 1) the cadre system incentivizes funding and the creation of political space for local and regional enforcement agencies, called Environmental Protection Bureaus ("EPBs"), and 2) the EPBs create accurate data to ensure accountability.

Part II provides background for the political history and context of the cadre system. Part III provides an analysis of the likely effectiveness of implementation. Part IV argues that long-term water quality attainment requires a developed environmental enforcement agency, and that the cadre system should officials to provide greater political space and funding for those agencies. Part V comments on the opaque and centralized nature of

¹² *Id.* at 61.

¹³ Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984), available in English at http://english.mep.gov.cn/Policies_Regulations/laws/environmental_laws/200710/t20071009_109915.htm (last visited Dec. 19, 2010). The amendments also modified regulations, implemented the country's first national permitting system, attached personal liability to actors in polluting entities, and strengthened the position of civil legal aid groups in citizen suit litigation. See Dawn Winalski, Note, *Cleaner Water in China?*, 24 J. ENVTL. L. & LITIG., 181, 185 (2009).

the cadre system, and provides suggestions for methods of incorporating public input. Part VI concludes.

II. BACKGROUND: THE CADRE SYSTEM IS A PROVEN SOLUTION FOR A PRESSING NEW PROBLEM

Water pollution is a pressing problem in China. In this Part, Section A describes China's problems with water pollution and early legal efforts to combat it. Section B describes the framework by which the Ministry of Environmental Protection attempts to enforce environmental laws. Finally, Section C describes the history and implementation mechanisms of the cadre system.

A. *Legal Efforts to Combat Water Pollution Have Proven Insufficient*

In 1978, under the leadership of Deng Xiaoping, China began privatization and what is now known as the Chinese economic miracle. Markets and foreign domestic investment mushroomed, causing GDP per capita to increase more than twenty-fold from \$84 in 1984 to \$2,034 in 2007.¹⁴ As that growth was based largely on industry and factory production, environmental degradation occurred on an unprecedented scale over the same time period.

In coordination with this degradation, China instituted several environmental laws. In 1978, the National People's Congress added Article 6, Section 1 to the Chinese constitution, providing that "the state protects and improves the living environment and the ecological environment, and prevents and controls pollution and other public hazards."¹⁵ Rivers and other bodies of water are state property subject to state control.¹⁶ Also in 1978, the National People's Congress passed the Environmental Protection Law (for trial implementation), which required related departments in the central government, as well as all provincial and municipal governments, to establish environmental protection institutes.¹⁷ This framework resulted in serious issues surrounding conflict of laws, as each level of government created differing environmental quality standards.

¹⁴ U.S. DEP'T OF STATE, COUNTRIES OF THE WORLD 430 (2008). Figures are exchange rate based.

¹⁵ Qiu & Li, *supra* note 10, at 10153; *see also* XIANFA art. 11 (1978), available at <http://xfj.jpkc.gdce.edu.cn/show.aspx?id=289&cid=27> (last visited Jan. 24, 2010).

¹⁶ MA JUN, CHINA'S WATER CRISIS 28 (Nancy Yang Liu & Lawrence R. Sullivan trans., EastBridge 2004).

¹⁷ Qiu & Li, *supra* note 10, at 10153.

Since the establishment of this framework, the National People's Congress has passed environmental legislation at a rate paralleling economic growth and international integration. From 1979 to 1984, China introduced only six new environmental laws. However, after 1984, China promulgated thirty-two environmental laws, including laws directed at the prevention of pollution by solid waste, the prevention and control of atmospheric pollution; soil and water conservation, energy production, and mineral mining.¹⁸ These laws addressed domestic environmental issues and responded to international treaty obligations.¹⁹

Thirty years after constitutional recognition of the obligation of the State to protect natural resources, epic water pollution remains, resulting from widespread institutional failure. The State Environmental Protection Agency graded water on a scale from I to V, I being pure and safe to drink, IV usable only for industry and farming, and V unusable for any purpose and unsafe to touch. In 2005, the agency took 411 monitoring sections for surface water in seven major water systems throughout the country, including the Yangtze River and the Yellow River. The section ratios in levels I through III, levels IV through V, and inferior level V were forty-one percent, thirty-two percent, and twenty-seven percent, respectively.²⁰ In 2007, eleven of the twenty-eight major lakes were grade V.²¹ The China Watch Institute reported in 2006 that seventy percent of the nation's rivers were moderately contaminated.²² While these statistics are shocking, they were likely underreported. A 2009 Ministry of Environmental Protection ("MEP") report suggested that previous pollution figures have been severely conservative, in that they did not account for agricultural waste in determining chemical oxygen demand. The volume of discharge of water pollutants is about double previous estimates.²³

¹⁸ Srinivasan, *Regulating the Belching Dragon: Rule of Law, Politics of Enforcement, and Pollution Prevention in Post-Mao Industrial China*, 18 COLO. J. INT'L ENVTL. L. & POL'Y 267, 298 (2007).

¹⁹ *Id.*

²⁰ State Environmental Protection Administration, 2005 China Environment Status Gazette: Fresh Water Environment, http://www.zhb.gov.cn/plan/zkgb/05hjgb/200607/t20060727_91443.htm.

²¹ Jingyun Li & Jingjing Liu, China Environment Forum, Quest for Clean Water: China's Newly Amended Water Pollution Control Law 4-5, http://www.wilsoncenter.org/topics/docs/water_pollution_law_jan09.pdf.

²² Zijun Li, *China's Rivers: Frontlines for Chemical Wastes*, CHINA WATCH INST., Feb. 23, 2006, available at <http://www.worldwatch.org/node/3884> (last visited Jan. 24, 2011).

²³ Jonathan Ansfield & Keith Bradsher, *China Report Shows More Pollution in Waterways*, THE NEW YORK TIMES, Feb. 10, 2010, available at www.nytimes.com/2010/02/10/world/asia/10pollute.html.

B. *Local Protectionism and Limited Resources Continue to Hamper Environmental Enforcement*

Under the legislative branch, ministries, administrations, and agencies oversee the implementation of law. They act as a regulatory branch at every level alongside CCP officials, who are responsible for general governance and allocation of funds.

In 1979, to implement the Environmental Protection Law, the National People's Congress created the State Environmental Protection Agency, which it upgraded to the State Environmental Protection Administration ("SEPA") in 1998.²⁴ In 2008, the National People's Congress acknowledged the growing necessity for effective environmental regulation by again, enhancing the power of the environmental agency in the national government.²⁵ The Standing Committee of the 10th National People's Congress elevated SEPA to ministry-level status, as the Ministry of Environmental Protection ("MEP").²⁶ This increased stature allows the MEP to regulate formerly higher-ranking development ministries, provides long-term stability to the ministry, and allocates a vote in State Council proceedings.²⁷ Despite the promotion, the creation of the MEP does not address weaknesses in vertical hierarchy and local implementation of national law and policy, as structural conflicts between economic development and environmental protection persist.²⁸

The MEP is charged with the enforcement of environmental law, with significant overlap with related departments.²⁹ Under the MEP, provincial, municipal, and county-level EPBs actually monitor conditions and implement fines.³⁰ There is vertical hierarchy within the EPBs, but under the 1989 Environmental Protection Law, the EPBs are also accountable to the people's government at the same level.³¹ Because each level of EPB has jurisdiction over emitters within its area, for any problem there are at least four sources of authority for enforcement (the three levels of EPBs, and at least the county-level people's government). This has resulted in ambiguity and conflicting goals of enforcement, further complicated by the fact that while environmental enforcement is under the purview of the MEP, the

²⁴ Qiu & Li, *supra* note 10, at 10153.

²⁵ *Id.* at 10152.

²⁶ *Id.* at 10153.

²⁷ *Id.*

²⁸ *Id.* at 10160.

²⁹ Qiu & Li, *supra* note 10, at 10158.

³⁰ *Id.* at 10160.

³¹ *Id.* at 10158.

Administration of Quality Supervision, Inspection, and Quarantine oversees national environmental standards, and the Ministry of Water Resources defines the environmental function of each body of water.³²

Enforcement of environmental laws is limited and sporadic due to the conflicting governmental goals of development and conservation, struggles with corruption and localization, and severely limited resources. Local government officials strive to increase development as a foremost goal, both to meet evaluation criteria and to provide funds for the localized tax system.³³

Even in instances where the political will exists for enforcement, resources are limited. For example, in 1998 in Shanghai, China's most populous and one of its wealthiest, most modern, and most international cities, pollution inspectors working full time could not manage to visit each factory within the city even once a year. When officials reported violations and assessed fees, they collected only twelve percent of those fees. The municipal EPB, with only three attorneys, lacked the resources to criminally prosecute violations or sue for fees. In contrast, New York State, which has roughly the equivalent population of Shanghai, has ninety-eight state attorneys dedicated to environmental protection in addition to thirty-seven environmental attorneys in the attorney general's office.³⁴ Wang Canfa, the director of China's only environmental legal aid non-governmental organization, Center for Legal Assistance to Pollution Victims (CLAPV), estimated in 2005 that only ten percent of China's environmental law is enforced.³⁵

Enforcement has even been difficult against the government itself. Powerful state-owned entities that are large enough to absorb fee costs rather than reforming behavior further undermine enforcement efforts.³⁶ These entities, prior to the ascension of the MEP, have freely ignored environmental standards under the protection of superior political rank.³⁷ Even when acknowledging environmental fines, many of these entities flagrantly violate laws based on a strictly economic calculus, finding it is cheaper to occasionally pay fees than to implement new technology.³⁸ This

³² *Id.* at 10159.

³³ *Id.* at 10160.

³⁴ ELIZABETH C. ECONOMY, *THE RIVER RUNS BLACK* 36, 111-13 (Cornell Univ. Press 2004).

³⁵ Embassy of China, *China Improves Enforcement of Environmental Laws*, <http://www.chinese-embassy.org.uk/eng/zt/Features/t214565.htm>.

³⁶ Wang Minyuan, *China's Pollutant Discharge Permit System Evolves—Behind Its Economic Expansion*, 19 *VILL. ENVTL. L. J.* 95, 100-01 (2008).

³⁷ Qiu & Li, *supra* note 10, at 10155.

³⁸ *See generally* Wang, *supra* note 36.

behavior is responsible for severe pollution and encourages massive-scale violation by both private and government actors.³⁹ For instance, in 2005, the then-SEPA issued a list of thirty major national construction projects that violated the 2003 Environmental Impact Assessment Law and enjoined their continuation.⁴⁰ The Three Gorges Dam Project Company, as well as twenty-eight other companies, completely ignored the injunctions and completed the projects.⁴¹

Despite severe limitations, there is a general trend toward stronger rule of law and more comprehensive regulation and enforcement, spurred on by increasing activism, regulatory inertia, and international pressure. Since starting in 1998, CLAPV has registered over 10,000 complaints and pursued over 100 cases, some with as many as 1,700 plaintiffs.⁴² During the same period, state agencies have gradually increased compliance. Prior to the 2008 amendments to the LPCWP, China created a localized water pollutant discharge permitting system under an earlier version of the LCPCWP and strengthened by the 2004 Administrative Permit Law.⁴³ Between 1996 and 2000, Chinese cities roughly doubled the number of permitted polluters and discharges, with some resulting increase in water quality.⁴⁴ Furthermore, international bodies and foreign investors are increasingly demanding improved environmental regulation. China's entry into the World Trade Organization (WTO) carries explicit obligations to develop a certain degree of transparency and provide legal remedies, at least in the commercial context.⁴⁵ However, rule of law is increasingly limited, and the above examples are exceptions to the paramount power of political control.

C. *The CCP and Its Cadre System Provide a Political Enforcement Structure*

China is a civil law state guided by a Constitution. Legislative power is implemented through the National People's Congress, which was created

³⁹ *Id.*

⁴⁰ Qiu & Li, *supra* note 10, at 10155.

⁴¹ *Id.*

⁴² Austin Ramzy, *Heroes of the Environment*, TIME MAG., Oct. 17, 2007, available at http://www.time.com/time/specials/2007/article/0,28804,1663317_1663320_1669921,00.html (last visited Jan. 24, 2011).

⁴³ Winalski, *supra* note 13, at 188-90.

⁴⁴ In 1996, Chinese cities that implemented the water pollutant discharge permit system issued 41,720 pollutant discharge permits to 42,412 enterprises; in 2000, 71,027 enterprises obtained 80,899 water pollutant discharge permits, and the number of enterprises that obtained pollutant discharge permits had risen to over 80,000 by the end of 2002. Wang, *supra* note 36, at 102.

⁴⁵ Goldman, *supra* note 1, at 253.

by the Constitution.⁴⁶ Despite the Constitution, the fundamental law that informs all of China's institutions is the leadership of the CCP with multiparty cooperation.⁴⁷ While the CCP is not a *per se* constitutional authority, it is the *de facto* supreme power and enforces one-party rule.⁴⁸ The CCP serves as a parallel power structure that ensures implementation and enforcement of law,⁴⁹ according to its own Constitution and regulations.⁵⁰ The LPCWP is unusual in that it statutorily invokes CCP implementation, which is generally assumed as an underlying premise of legislation.⁵¹ Article 5 stipulates that "the fulfillment of water environmental protection targets constitutes to be a part of the performance evaluation of local people's governments or their responsible persons."⁵² The cadre system is a formal evaluation system used by superiors within the Party to measure officials' performance. The CCP uses it to incentivize a variety of goals, resulting in complex 'report cards' for officials, with points allotted according to the import of a policy in a certain area.⁵³ Prior to the LPCWP, the CCP invoked the cadre system to incentivize reforestation of fallow fields,⁵⁴ but otherwise has not applied it to environmental legislation.

The priorities within the evaluation serve as a political structure that can both enhance and conflict with legislation by determining the conduct of state agents. Evaluations attach strict liability for positive or negative results to a political official, serving as an efficient hierarchical means of concretizing state policies and controlling the actions of the roughly sixty million state employees.⁵⁵ In some instances, officials are grouped and considered collectively responsible for the performance of any individual, in both professional and private life.⁵⁶ Officials who meet established goals are rewarded with promotions, bonuses, and public praise. This system not only

⁴⁶ *Id.*

⁴⁷ Jiang Shigong, *Written and Unwritten Constitutions: A New Approach to the Study of Constitutional Government in China*, 36 *MODERN CHINA* 12, 23 (2010).

⁴⁸ IMPLEMENTATION OF LAW IN THE PEOPLE'S REPUBLIC OF CHINA 6 (Jianfu Chen, Yuwen Li, Jan Michiel Otto eds., Kluwer Law Int'l. 2002).

⁴⁹ Jiang, *supra* note 47, at 27 (quoting Deng Xiaping, "without the Party laws and regulations, it would be hard to ensure that state laws are enforced").

⁵⁰ See Full Text of Communist Party of China, Seventeenth National Party Congress of the Communist Party of China, http://news.xinhuanet.com/english/2007-10/25/content_6944738.htm.

⁵¹ Jiang, *supra* note 47, at 23-27.

⁵² Law on the Prevention and Control of Water Pollution, art. 5 (2008).

⁵³ Susan H. Whiting, *The Cadre Evaluation System at the Grass Roots: The Paradox of Party Rule*, in *HOLDING CHINA TOGETHER* 101, 102-03 (Barry J. Naughton & Dali L. Yang eds., Cambridge Univ. Press 2004).

⁵⁴ *Id.* at 105.

⁵⁵ *Id.* at 67.

⁵⁶ *Id.* at 72 (citing example of instance in which an entire bureau lost annual bonuses because one member was detained on solicitation of prostitution charges).

further Party control over local agents, but strengthens the commitment those agents have to the Party.⁵⁷ Within China's authoritarian, communist structure, the cadre system provides market signals in that it incentivizes behavior with monetary reward.⁵⁸

Failure to meet goals leads to demotions, salary reductions, and public censure. Superiors attempt to meet their own performance standards by establishing joint strict liability for those lower officials, even extending to personal responsibility contracts with civilian, elected village leaders.⁵⁹ The widespread use of the cadre system and evaluation criteria has increased state capacity to monitor and control lower-level agents.⁶⁰ Variable and sometimes conflicting criteria for a variety of policy goals lead to a pressurized environment in which officials can be reduced to a reactionary role.⁶¹

1. *China Has a Long History of Vertical Government Control Through Responsibility and Incentive Systems*

Evaluation and responsibility systems have existed in China since organized government.⁶² The imperial system channeled a tremendous amount of information to the emperor and relatively few magistrates. In order to simplify the determinations of those who caused failures and for what reason, responsibility systems attached strict and joint (collective) liability.⁶³ For example, the Ming Code applied collective criminal liability to colleagues of magistrates who committed even inadvertent errors.

Control of state agents is a critical aspect of any government, one that democratic states attempt to control from the bottom-up with elections. For a brief period during the late years of Mao Zedong's rule, the Party abandoned a hierarchical cadre system and attempted to control the bureaucracy from the bottom-up by fostering mass political campaigns and a state of constant revolution.⁶⁴ The resulting violence and instability gave rise to the rebirth of a Leninist hierarchical order and cadre system as part of the major reforms of the 1970s.⁶⁵

⁵⁷ Whiting, *supra* note 53, at 102.

⁵⁸ Qiu & Li, *supra* note 10, at 10162.

⁵⁹ Minzner, *supra* note 9, at 56.

⁶⁰ Maria Edin, *State Capacity and Local Agent Control in China: CCP Cadre Management from a Township Perspective*, 173 THE CHINA QUARTERLY 35, 50 (2003).

⁶¹ Minzner, *supra* note 9, at 56, 68-70.

⁶² *Id.* at 63.

⁶³ *Id.*

⁶⁴ Edin, *supra* note 60, at 45.

⁶⁵ *Id.* at 50; *see also* Minzner, *supra* note 9, at 66.

The official promulgation of the modern cadre system occurred in 1979, when the Organization Department of the Party called for the establishment of a new evaluation system for officials. The evaluations were to consider political thought, organizational and leadership abilities, familiarity with substantive issues, democratic work style, and actual achievements.⁶⁶ Actual achievements have become the primary focus, with the most weight placed on numerical target goals capable of measurement.⁶⁷

2. *The Establishment and Implementation of Evaluation Formulas Reflects Regional Priorities*

While the CCP sets the national policy for evaluation systems, city and county level officials have considerable discretion in determining the specific criteria and formula to reflect local conditions.⁶⁸ Numerical goals are typically weighted in tiers according to priority. The most important goals gain “veto power,” in that the failure to achieve them trumps all other accomplishments.⁶⁹ These goals most typically are economic growth and birth quota goals.⁷⁰ In one county in Zhejiang in 1998, embezzlement of over RMB 200,000, eruptions in violence resulting in a person’s death, and the protests of over fifty people served as veto failures.⁷¹

The cadre system is flexible. Superior authorities set numerical goals, leaving methods of attainment to lower officials.⁷² Because the evaluation system and weighting within it is not law, those superior authorities may change it quickly to reflect new priorities. The cadre system’s strict and joint liability is particularly well suited for countries in which resources for oversight of local government are limited, because it removes the need for superior authorities to question why a failure occurred or whose responsibility it was. However, this simplicity carries with it dangers of falsification of results and human rights abuses.

The cadre system has become a primary means of monitoring and controlling officials. It pervades every aspect of Chinese government,

⁶⁶ Edin, *supra* note 60, at 102-03.

⁶⁷ Minzner, *supra* note 9, at 79.

⁶⁸ Whiting, *supra* note 53, at 106.

⁶⁹ Minzner, *supra* note 9, at 100.

⁷⁰ *Id.*

⁷¹ Edin, *supra* note 60, at 40.

⁷² In this way, the cadre system embraces an application of most cost-efficient solutions long advocated by market theorists.

including judicial resolution of civil disputes.⁷³ The next section will outline and assess the cadre system's application.

III. THE LPCWP'S IMPLEMENTATION OF THE CADRE SYSTEM HAS THE POTENTIAL TO FORCE LOCAL OFFICIALS TO BECOME STAKEHOLDERS IN WATER QUALITY ATTAINMENT

The ultimate test of an environmental regime's effectiveness is physical outcome,⁷⁴ which for the purposes of this comment, is improvement of water quality. The cadre system has the potential to improve water quality because it will enlist the political and financial support of local officials, which in turn will allow EPBs to more fully perform their job. The political solution would allow the physical solution to occur.

The cadre system will convert local officials into stakeholders in water quality attainment because it neatly fits China's authoritarian government structure and Confucian and Legalist legal traditions, as defined and explained in Part B of this section. The cadre system also implements a vertical hierarchy proven effective in the One Child Policy and increases mediation in the judicial system.

A. *Because the CCP Has Extensively Used the Cadre System to Remedy Administrative Deficiencies, It Provides a Known and Workable Model*

The cadre system uses an existing vertical hierarchy to connect central and local governments.⁷⁵ This is especially important considering the confusion and lack of hierarchy in the Chinese legislative process.⁷⁶ At the national level, the National People's Congress, the National People's Congress Standing Committee, the State Council, and the Supreme Court all have legislative powers. State-level Local People's Congresses also have legislative power of functionally equal hierarchy, and there is widespread confusion in the judiciary regarding resolution of conflicts of law.⁷⁷ In

⁷³ Minzner, *supra* note 9, at 72.

⁷⁴ Arild Underdal, *One Question, Two Answers*, in ENVIRONMENTAL REGIME EFFECTIVENESS 1, 11 (Miles et al. eds., MIT Press 2002) (discussing regimes broadly, including international treaty regimes).

⁷⁵ Jiang, *supra* note 47, at 32.

⁷⁶ Mitzi Huang, *Seeds of Legal Discontent, The Luoyang Seed Case: A Case Study of the Rule of Law in China*, 3 DARTMOUTH C. UNDERGRADUATE J. OF L. 32, 32 (2005).

⁷⁷ *Id.* at 32-33.

contrast, the CCP has a streamlined vertical hierarchy from county-level officials to the General Secretary,⁷⁸ largely avoiding conflicting policies.⁷⁹

The cadre system is an attractive means of meeting the challenge of regulating the environment with minimal resources because it shrinks the complexity of regulation. Rather than implementing central oversight of the regulation of millions of pollution sources, the provisions apply a relatively simple output standard to water bodies and leave the attainment of those standards to local officials. Streamlining of oversight is especially important given the enormity and complexity of China's environmental challenges.

China's leaders must manage a nation with severely depleted and compromised natural resources, while serving a population five times as large as the United States. They must strive to pull roughly one hundred thirty million people out of poverty,⁸⁰ while restructuring an economy that imports much of the developed world's pollution. They must do so with a relatively young legal system, developing rule of law, and a limited regulatory state. The challenges of monitoring and enforcing a command and control system of environmental regulation are enormous in every setting. This can be seen in an example in the United States. In 1997, the U.S. Environmental Protection Agency spent over seven billion U.S. dollars,⁸¹ yet in 1998 estimated that rates of significant noncompliance for major facilities were 20% under the Clean Air Act, 21-28% under the Resource and Recovery Conservation Act, and at least 7% under the Clean Water Act.⁸² These low levels of compliance, achieved at enormous cost in a system with strong rule of law, demonstrate the difficulty of environmental enforcement.

The paramount importance of interpersonal relationships and reputation within the CCP furthers central control because high-level officials can grant obedient lower-level officials power through the social prestige of high-level connections.⁸³ Central leaders, using the cadre system

⁷⁸ Constitution of the CCP art. 10(1) (2007), available at http://news.xinhuanet.com/english/2007-10/25/content_6944738.htm (last visited Jan. 24, 2011).

⁷⁹ Jiang, *supra* note 47, at 32.

⁸⁰ World Bank, *China's Success Against Poverty: Lessons for Africa?*, <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:21778188~pagePK:64165401~piPK:64165026~theSitePK:469382,00.html>

⁸¹ Carol M. Browner, Administrator E.P.A., FY 1998 Budget Presentation (Feb. 6 1997), available at <http://yosemite.epa.gov/opa/admpress.nsf/a883dc3da7094f97852572a00065d7d8/3ebe42defe5deb8a8525701a0052e3a2!OpenDocument>).

⁸² CLIFFORD RECHTSCHAFFEN & DAVID L. MARKELL, *REINVENTING ENVIRONMENTAL ENFORCEMENT & THE STATE/FEDERAL RELATIONSHIP* 174-75 (Env'tl. L. Institute 2003).

⁸³ TONY SAICH, *GOVERNANCE AND POLITICS IN CHINA* 104 (Palgrave 2001).

and other means, single out and identify promising local leaders to fast-track their careers. For example, central officials invite favored young party members to attend the Central Party School, a three-month to yearlong vacation, training opportunity, and networking event.⁸⁴ In a system based on personal connections, social pressure serves to accomplish political objectives. Because party membership is perceived as a requisite for financial success, the CCP is bigger, younger, and more educated than ever before.⁸⁵ These future leaders, because of hierarchical control, are incentivized to comply with party directives, with this incentive serves as the critical vertical link in a centralized authoritarian state.

The measured successes of the One Child Policy and increases in judicial mediation, explained within, demonstrate that this regulatory mechanism is blunt, best suited for easily measurable problems, and easiest to implement when attempting to regulate a vulnerable population. Because water quality and its causal connection with pollution sources and cleanup efforts is inherently complex, attenuated over time and space,⁸⁶ and requires the regulation of politically and economically powerful actors, the provisions are likely to be most effective in curtailing high-profile, significant pollution. Unlike the One Child Policy and judicial mediation, water quality attainment requires the utilization of regulatory agencies.

1. *The One Child Policy and Encouragement of Mediation as a Judicial Mechanism Serve as Examples of the Brutal Effectiveness of the Cadre System*

The One Child Policy has become a symbol in the West of draconian policies and limitations of personal freedom. The Chinese government has repressed the fundamental desire to reproduce through a policy which severely affects women, particularly poor women in rural areas.⁸⁷ However, in achieving the desired result, the policy has worked, as scientists agree that it has prevented approximately 250 million births.⁸⁸

In the face of a population crisis and determined to markedly improve GDP, Deng Xiaoping implemented the One Child Policy in 1980 with a

⁸⁴ *Id.* at 103-04.

⁸⁵ *Id.* at 107-08.

⁸⁶ *Id.* at 184.

⁸⁷ See Xiaorong Li, *License to Coerce: Violence Against Women, State Responsibility, and Legal Failures in China's Family Planning Program*, 8 *YALE J. L. & FEMINISM* 145 (1996).

⁸⁸ Jim Yardley, *China Sticking With One-Child Policy*, *NEW YORK TIMES*, Mar. 11, 2008, available at <http://www.nytimes.com/2008/03/11/world/asia/11china.html?ex=1362888000&en=1b58c8828bd897a6&ei=5088> (last visited Feb. 18, 2011).

revised Marriage Law. The law delayed the age of legal marriage, provided free contraception to married couples, and limited births to one child per couple. It codified a policy of limiting population growth and made it compulsory.

As with environmental regulations, decentralized regulation left to local officials with limited national oversight was ineffective and inconsistent. When politically decentralized policy implementation failed to produce the desired results, the Communist Party Central Committee and the State Council decided to employ the cadre system. The 1991 “Decision on Stepping Up Family Planning Work and Strictly Controlling Population Growth” entrusted senior party officials at each level with responsibility for supervising birth control in regions under their administration. According to the new “family-planning target management responsibility contracts” announced in this Decision, the performance of party leaders and government officials is assessed on the basis of their “achievement” of the allocated birth quotas for their areas. Failure to keep the number of births within the quota could mean demotion, stiff fines, or the loss of bonuses.⁸⁹ In most areas, birth quotas were given top priority in the cadre system evaluations, with veto power.

Like the LPCWP provisions, the One Child Policy incentivizes enforcement of a previously unenforced mandate and allows discretion in the method of attaining numerical goals. In the case of the One Child Policy, the cadre system has been so successful that China must now contend with a population bottleneck.⁹⁰

The judicial system provides another example of the rigid effectiveness of the cadre system in attaining at least a rough proxy for desired outcomes. Judges face targets and resulting evaluation points for rates of mediation, case closures, and appellate reversals.⁹¹ Higher court officials bear responsibility for the attainment of inferior judges.⁹² Most recently, Chinese authorities have favored mediation as the preferred outcome and established high rate targets. As a result, from 2004 to 2008, mediation rates increased 137%, with some local courts mediating 99% of cases.⁹³ The attainment of these results unavoidably resulted in sacrifices of litigants’ rights and just outcomes.

⁸⁹ Li, *supra* note 87, at 155

⁹⁰ Yardley, *supra* note 88.

⁹¹ Minzner, *supra* note 9, at 72-73.

⁹² *Id.* at 73.

⁹³ *Id.* at 93.

2. *History Suggests That the Cadre System Will Force at Least Rough Compliance with Policy Goals*

The examples of the One Child Policy and encouragement of mediation are distinguishable from water quality attainment in that they impose incentives directly on government actors. The LPCWP's implementation of the cadre system, on the other hand, gambles that properly incentivized local officials will support the EPBs in order to gain an outcome. The former examples are further distinguished in that the government actors carry out the policies against relatively powerless actors, whereas polluters are often wealthy and politically well connected.

The One Child Policy has been so effective in part because it mobilizes the power of the state against relatively powerless individuals.⁹⁴ It has been least effective against wealthy and connected families.⁹⁵ Similarly, the judiciary in China is weak and litigants have few enforceable procedural rights. The LPCWP, in contrast, seeks to regulate industry, the wealthiest and most powerful player in Chinese society.

Because the LPCWP employs indirect incentives and regulates powerful actors, it is likely to be less effective than the One Child Policy and encouragement of judicial mediation. However, these policies provide cogent examples of the power, danger, and limitations of incentivizing local officials to carry out national standards. It has been a successful yet blunt means of quickly attacking a pressing and complicated problem. Experience suggests that similar provisions in the LPCWP will serve to incentivize the cleanup and prevention of easily recognizable pollution. The power of the enforcement policy is that it uses the power of the party rather than the court, but that is also a limitation. Methods and degree of enforcement will remain inconsistent and unpredictable beyond achieving the result.

In sum, the cadre system, if implemented with sufficient weight given in evaluation systems, will push local officials to become stakeholders in environmental regulation. That process would be enhanced and legitimized by allowing further public involvement. However, the complexity of water

⁹⁴ In 2007, despite a national directive limiting the use of force in attaining birth quotas, officials in Guangxi demolished homes, forced tubal ligations, and exacted stiff fines. Villagers rioted and sacked government offices, in a rare instance of successful protest. See Minzner, *supra* note 9, at 55.

⁹⁵ Andrew Jacobs, *Abuses Cited in Enforcing China Policy of One Child*, NEW YORK TIMES, Dec. 21 2010, available at <http://www.nytimes.com/2010/12/22/world/asia/22population.html> (last visited Feb. 18, 2011).

quality attainment⁹⁶ exceeds that of other social policies implemented by the cadre system and will require the aid of EPBs, as discussed in section IV.

B. The Cadre System Effectively Engages Chinese Cultural and Political History

While the substantive provisions of the LPCWP largely reflect American environmental laws, the accountability provisions mark a turn toward Chinese methods of enforcement. Employing the cadre system should be effective because an implementation structure already exists, and the cadre system reflects China's legal and cultural history.

Chinese environmental laws have largely adopted a command and control structure from western democracies with developed administrative states.⁹⁷ That strategy has not been well-suited to China, due to its decentralized government structure, nascent administrative state, limited rule of law, and common reliance on cooperative mechanisms that use social pressure and connections to bargain for compliance.⁹⁸ Thus, those environmental laws have failed not only in securing compliance from pollution emitters, but also in achieving widespread political investment of local officials.

Beyond structural differences, part of this failure has been due to a cultural misapplication. Western schools of legal thought attempt to separate the individual holding the office from their official capacity.⁹⁹ Furthermore, separation from politics legitimizes law as an objective force in Western society.¹⁰⁰ In contrast, the Confucian legal tradition views the government official as a moral and legal example to his constituents. While the state is specifically atheist, governmental philosophy reflects Confucianism through paternalism and belief in man's ability to shape nature for its benefit.¹⁰¹ Officials in Imperial China, popularly known as *fumu guan* (parent official), had broad political, legal, and personal power over citizens with a correspondingly broad obligation to oversee the general welfare in both the

⁹⁶ YEAGER, *supra* note 9, at 219. The author notes that as early as 1985, there were 65,000 unique chemicals produced in America and contained in its waters in some amounts.

⁹⁷ XIAOYING MA & LEONARD ORTOLANO, *ENVIRONMENTAL REGULATION IN CHINA* 128 (Rowman & Littlefield Pub. 2000).

⁹⁸ *Id.*

⁹⁹ For example, in the United States, government officials performing discretionary functions are shielded from personal liability "insofar as their conduct does not violate clearly established statutory or constitutional rights of which a reasonable person would have known." *Harlow v. Fitzgerald*, 457 U.S. 800, 818 (1982).

¹⁰⁰ Morton J. Horowitz, *The Rise of Legal Formalism*, 19 AM. J. LEGAL HIST. 251, 254 (1974).

¹⁰¹ ECONOMY, *supra* note 34, at 36; *see also* JUDITH SHAPIRO, *MAO'S WAR AGAINST NATURE* 7 (Donald Worster & Alfred W. Crosby eds., Cambridge Univ. Press 2001).

private and public sphere.¹⁰² While the Confucian ethic dominated, Legalism was its constant balance, preaching limitation of officials' discretion through equal application of law to official and commoner alike and the benefits of uniformity, consistency, and predictability.¹⁰³ Unlike Western legal thought, however, Legalism stresses group accountability for individual wrongs.¹⁰⁴

Application of the cadre system to a command-and-control water law pursues the same goals of accountability that American environmental laws achieve with citizen suits. In channeling accountability to the well-established CCP bureaucracy rather than the nascent judiciary, the law effectively puts a "Chinese face" on environmental law.¹⁰⁵ The cadre system combines these philosophies in that it treats the official as a morally responsible individual agent, yet applies quantitative measures with strict joint liability.

Professor Carl Minzner argues that the system derives from functional rather than cultural conditions, citing as evidence the use of strict joint liability systems of agent control in Medieval England and elsewhere.¹⁰⁶ However, while the cadre system may not arise from strictly cultural norms, it is justified and implemented within a cultural context. This context, of hierarchical liability regulating official behavior in both a moral and goal-oriented sense, makes the cadre system well suited to Chinese governance. Chinese cultural history creates a hospitable environment for this means of enforcement and heightens its chance of success.

Confucianism is a form of social thought that dominated family and legal thought in dynastic China,¹⁰⁷ and continues to guide Chinese culture. The basic tenants are those of culturally imposed duty between a lesser and a superior. If every member of a society acts according to his duty in those relations, the society as a whole would function smoothly.¹⁰⁸ This creates a political system based on custom, in which individuals are ruled by persons

¹⁰² William P. Alford, *On the Limits of "Grand Theory" in Comparative Law*, 61 WASH. L. REV. 945, 951-52 (1986)

¹⁰³ PHILLIP M. CHEN, *LAW AND JUSTICE; THE LEGAL SYSTEM IN CHINA 2400 B.C. TO 1960 A.D.* 30 (Dunellen Publishing 1973).

¹⁰⁴ *Id.*

¹⁰⁵ Alford, *supra* note 102, at 955.

¹⁰⁶ *Id.* at 88.

¹⁰⁷ *Id.* at 40.

¹⁰⁸ *Id.* at 25.

rather than laws,¹⁰⁹ to the extent that some scholars hesitate to even term it a legal system.¹¹⁰

The establishment of personal political accountability within a vertical governmental structure reflects Confucian values, as does granting officials discretion in determining how to implement a regulatory system. However, tying local officials' performance to nationally mandated standards and subjecting those officials to punishment diverts from Confucianism in that it tempers discretion and removes legally privileged status.

In applying objective standards to control official action, the cadre system reflects legalist principles. Early legalist scholars questioned the attainability of a Confucian political system based on ethics, and advocated for law as a means to control self-interest and generate stability.¹¹¹ A legalist system favored comprehensive national standards and gained ground with the collapse of the feudal system in 221 B.C. under the Ch'in and Han dynasties.¹¹² Legalist underpinnings are evidenced in the punitive measures available in a cadre system. By contrast, under a pure Confucian ideology, leaders rule by example, are not subject to punishment without imperial decree, and ideally would never have to punish.¹¹³

The provisions balance influences of both Confucianism and legalism in creating an enforcement provision uniquely suited to Chinese culture and regulatory resources. It recognizes the duty of officials to protect their people and imposes an ethic upon them. At the same time, by creating incentives coupled with national standards, it standardizes their political will, acknowledges self-interest, and guides that interest toward protecting water resources. Rather than make regulation apolitical, they standardize and incorporate politics as a tool to achieve legal ends. This balance of elements from the Chinese legal tradition represents a promising direction in regulatory law.

¹⁰⁹ *Id.* at 26.

¹¹⁰ JOHN W. HEAD, CHINA'S LEGAL SOUL: THE MODERN CHINESE LEGAL IDENTITY IN HISTORICAL CONTEXT 111 (Carolina Academic Press 2009).

¹¹¹ ECONOMY, *supra* note 34, at 32-33.

¹¹² *Id.* at 35.

¹¹³ CONFUCIUS, ANALECTS II, <http://classics.mit.edu/Confucius/analects.html> (The analects admonish rulers to "lead the people by regulations, keep them in order by punishments, and they will flee from you and lose all self-respect. But lead them by virtue and keep them in order by established morality and they will keep their self-respect and come to you.").

IV. EFFECTIVE IMPLEMENTATION OF THE CADRE SYSTEM WILL REQUIRE COOPERATION WITH ENVIRONMENTAL PROTECTION BUREAUS

The cadre system will only be a successful political and physical solution leading to sustainable results if it incentivizes a shift in institutional priorities and creates real structural change in the form of empowerment of EPBs at all levels. Without that step, it will serve only to address immediate symptoms and will leave in place the fundamental problems of insufficient political and financial power for effective environmental enforcement.¹¹⁴

Without structural changes, there are glaring practical and legal weaknesses in an upstream regulatory strategy that relies on local officials to bring about enforcement. This strategy first assumes that water quality is an objective fact and that performance will be measurable.¹¹⁵ It further assumes accurate reporting. In order to make those assumptions reality, Chinese EPBs will have to supplement national water quality standards with watershed-specific goals, and independently report results. A further difficulty is the schizophrenic demands created by an incentive structure that rewards one person for both economic growth and environmental protection. The cadre system takes the fundamental problem that both command and control and market based systems face, of balancing economic growth and conservation, and places it squarely on local agents. Because officials lack the tools to manage the complexities of water quality, in order to be successful, the cadre system in the LPCWP requires the expertise of the EPBs.

Fortunately, the cadre system also has the potential to facilitate EPB enforcement, because it removes its largest impediment: local officials. Enforcement has been limited by lack of political authority and lack of resources, which in turn has created perverse fining incentives. Enlistment of local officials as stakeholders should help to secure improved political and financial support.

A. *The Cadre System Will Only Improve Water Quality to the Extent That EPBs Can Provide Measurable Standards and Report Accurate Data*

The examples cited in this comment, the One Child Policy and encouragement of judicial mediation, are easily countable and subject to relatively direct solutions. Indeed, the strength of the cadre system is the

¹¹⁴ ECONOMY, *supra* note 34, at 21.

¹¹⁵ U.S. Env. Protection Agency, *Performance Measures*, http://www.epa.gov/ocir/nepps/performance_measures.htm (discussing the “information challenges associated with building a results-oriented management system”).

simplicity and accountability of applying clear, hard numbers and instructions.¹¹⁶ In the water law context, however, the cadre system will only create political space for EPBs to fill, and its physical success will depend on the EPBs' capacity to do so.

1. *An Evaluation System Requires Accurate Data to be Physically Effective*

To be anything more than a stopgap measure to address crisis episodes of obvious pollution, the cadre system will require consistent, accurate, reported data. The cadre system works best for numerical target goals capable of being measured.¹¹⁷ The MEP possesses the technology and institutional capability to do so, as evidenced by its comprehensive 2009 water quality report. However, those reports must be more consistent to render useful data over time.

2. *Falsification of Reporting Represents a Major Problem that Can Only be Resolved by Frequent Testing and Reporting by Higher-Level EPBs*

The cadre system works by incentivizing compliance based on self-interest. However, the strongest incentive for self-interested officials is to falsify data, allowing them to collect the benefits of attainment without spending resources. In the environmental context, falsifying officials could achieve economic growth through polluting industries and simply provide fake water quality statistics. Moreover, a vertical hierarchy system encourages collaboration between actors at the same level.¹¹⁸

Studies in China have found widespread falsification within the cadre system. A 2008 survey of 316 villages found that eighty-one percent of the officials lied about their village income data, with an average of a forty-four percent discrepancy.¹¹⁹ To combat this inflation, high-level officials conduct elaborately secretive detection tours. Under one method, officials were given three sealed envelopes to open at different stages in their journey to check reported birth statistics in a village, each one directing them to the next location on a sort of sleuthing scavenger hunt. Village officials were

¹¹⁶ Minzner, *supra* note 9, at 104.

¹¹⁷ *Id.* at 79.

¹¹⁸ ROBERT AXELROD, *THE EVOLUTION OF COOPERATION* 86 (Basic Books, Inc. 1984). The author cites as evidence extensive game theory analysis as well as reports of ritualized, fake aggression widely displayed by soldiers on opposite sides during World War I, intended to satisfy superiors while not causing injury.

¹¹⁹ Lily Tsai, *The Falsification of Village Income Statistics*, 196 *CHINA Q.* 805, 809 (2008).

still able to evade this system by tracking government license plate numbers.¹²⁰

Cooperative falsification can be beaten by monitorable facts.¹²¹ Water quality provides distinct advantages in that it is not readily moved (as children are under the One Child Policy) or hidden (as income data is with falsified forms). It is objectively testable, but requires concrete standards and testing and reporting procedures. Because of political constraints, previous accountability testing has required national-level enforcement campaigns.¹²² However, campaigns lack the consistency to measure improvement and achieve long-term behavior modification.¹²³ Furthermore, they do not provide the necessary institutional changes needed for consistent enforcement.¹²⁴

B. Enforcement Problems Largely Result From Political Interference and Lack of Funding, Obstacles That Should Be Removed if Local Officials Become Stakeholders

The provisions rest on an assumption that local officials will respond to incentives by forcing environmental enforcement officials to work harder, forcing local industry to comply with regulations and reduce polluting activities, and to bear environmental interests in mind when financing and permitting projects. However, in the face of powerful polluting enterprises, constituents eager for economic development, and limited monitoring and enforcement resources, such demands may in some situations be impossible within existing structures. Incentivized local officials could remedy this by providing political and financial backing.

1. Given Weak Enforcement Tools and Cultural Preference, Environmental Officials in China Currently Rely on Cooperative Enforcement, but Political Backing Could Result in Stronger Regulation

Scant enforcement is the basis for the implementation of the cadre system in the LPCWP. The direct and indirect opposition by political officials has contributed to weak cooperative enforcement.¹²⁵

¹²⁰ Minzner, *supra* note 9, at 80-82.

¹²¹ AXELROD, *supra* note 118, at 82. Soldiers were forced to be aggressive when required by superiors to engage in specific numbers of raids on opposing trenches.

¹²² See generally van Rooij, *supra* note 11.

¹²³ *Id.* at 66, 68.

¹²⁴ *Id.* at 69.

¹²⁵ XIAOYING MA & ORTOLANO, *supra* note 97, at 129.

Administrative agencies look to local governments at their own level for enforcement powers.¹²⁶

For instance, a 1998 study of six Chinese EPBs found that each agency rarely enforced violations through the courts due to the costs, lack of legal training, and a desire to keep strong connections with polluting enterprises.¹²⁷ The agencies almost never removed permits for violations or assessed fines for false permits, for fear that the severity of removal and public accusations of cheating would upset connections and social well-being.¹²⁸ They rarely assessed compound fees for lack of payment or fines for late payment.¹²⁹

Proponents of cooperative enforcement assert a belief that partnerships and education preserve positive relationships between a regulator and regulated enterprise, facilitating enforcement with reduced transaction costs.¹³⁰ Scholars claim that it reflects a cultural preference for solving problems through social relationships¹³¹ and a lack of resources and political power to enforce. However, it cannot be effective without a source of power from which to bargain.

It is that lack of power that appears to be crucial in choice of enforcement mechanism. EPB staff stated in interviews that they didn't collect late fees because they feared that by penalizing enterprises, they might never collect any fees at all.¹³² Political pressures on local EPBs to ignore violations by wealth-producing emitters have been so strong that local EPB employees have resorted to writing anonymous letters to central EPB officials reporting violations for fear of being punished for hampering local development.¹³³ Lessening these pressures would go a long way toward facilitating enforcement.

The same analysis applies to courts, which are also funded by the local government.¹³⁴ Decisions are subject to political review at the local

¹²⁶ William P. Alford & Yuanyuan Shen, *The Limits of the Law in Addressing China's Environmental Dilemma*, in *ENERGIZING CHINA; RECONCILING ENVIRONMENTAL PROTECTION AND ECONOMIC GROWTH* 404, 415 (Michael B. McElroy, Chris P. Nielsen, & Peter Lydon, eds., Harvard Univ. Press 1998).

¹²⁷ MA & ORTALANO, *supra* note 97, at 129.

¹²⁸ *Id.* at 127.

¹²⁹ *Id.* at 128.

¹³⁰ This theory is increasingly popular in state run environmental agencies in the United States. States encourage entities to self-regulate and self-audit, while granting immunity for self-discovered violations. An example is the EPA's Environmental Excellence Initiative (XL), which allows companies to contract for self-policing. See RECHSTAFFEN & MARKELL, *supra* note 82, at 70-73.

¹³¹ MA & ORTALANO, *supra* note 97, at 129. See also discussion of Confucianism.

¹³² *Id.* at 127.

¹³³ He Jianrong, *Environmental Implementation Urges for Vertical Management*, LEGAL DAILY, Sept. 21, 2007.

¹³⁴ Alford & Shen, *supra* note 126, at 416.

level, and so the values of local officials are critical to judicial implementation of the LPCWP.

2. *Increased Local Funding Would Remove the Perverse Incentives that Cause EPBs to Rely on Polluting Industry for Funding*

EPBs rely on local officials for funding. In the past, funding has been limited because officials were rewarded almost entirely by economic growth, which the EPBs generally curtailed. Lack of funding resulted in both an incapacity to properly enforce regulations and a partnership with polluting industries. If incentivized local officials direct funds toward EPBs, these barriers may be removed. In this way, the cadre system has the potential to significantly enhance enforcement.

Officials further blamed failures to enforce permit standards on the expense of monitoring, lack of quality monitoring equipment, and resulting weak data.¹³⁵ As a result, the EPBs simply relied on data provided by the enterprises and pursued monitoring only if the data did not make sense on its face.¹³⁶ This shortage has directly caused lack of enforcement, and indirectly aligned the interests of the regulators and polluters.

EPBs have grown perversely dependant on pollution, and assess fines and fees at a level that encourages enterprises to pollute in order to seek the highest profits.¹³⁷ The EPBs chose low fines largely due to funding pressures. In 1994, municipal EPBs were funded eighty-seven percent by fees, municipal environmental monitoring centers sixty-nine percent, municipal environmental inspection stations one hundred percent, and district and county EPBs ninety-five percent.¹³⁸ Staff reported collecting fees with the goal of increasing revenue rather than ensuring compliance.¹³⁹

Even a small amount of local funding would significantly increase the independence of EPBs and enhance their regulatory authority. The cadre system has the potential to incentivize such funding.

¹³⁵ MA & ORTALANO, *supra* note 97, at 128-29.

¹³⁶ *Id.*

¹³⁷ *Id.* at 123.

¹³⁸ *Id.*

¹³⁹ *Id.* at 126.

C. *Despite Potential Benefits, the Incentive Strategy of the Cadre System is Not Well-Suited to the Long-Term, Watershed-Scale Management Required to Attain Comprehensive Water Quality*

This comment has argued that the cadre system as implemented in Article 5 of the LPCWP has the potential to shift institutional priorities and incentivize water quality improvement. However, because the cadre system implements short-term goals, these improvements will likely be limited to pollution curable with short-term, high-yield fixes. This will likely include substantial point sources due to their direct causation and individually significant impact, but will have limited ability to correct collective non-point source pollution problems.

Water quality presents a holistic watershed-based problem requiring sustained regulation across multiple jurisdictions.¹⁴⁰ Improvement has proven to be a nebulous and long-term endeavor in which protection projects often have no demonstrated link to actual cleaner conditions.¹⁴¹ Water quality, particularly in lakes and ponds with limited flushing capacity, involves myriad variables acting on an unpredictable timescale. It fluctuates widely based on precipitation and biological cycles. Surveys of environmental protection agencies in the U.S. have found that none have been able to provide accurate predictive measures of the effectiveness of compliance programs.¹⁴² Watershed managers and biologists now know that restoring water quality and resulting biodiversity requires the restoration of entire watersheds and the systems acting within them.¹⁴³ The impacts of human activity are cumulative over space and time, and mitigating them requires consistent effort to restore system processes rather than discrete problems.¹⁴⁴

The necessities of conservation conflict with the cadre system in both geographic scope and time. National level leaders can solve geographic scope issues by evaluating regional or provincial-level officials according to a broad area's water quality attainment. Those leaders would then in turn

¹⁴⁰ See YEAGER, *supra* note 9, at 60.

¹⁴¹ RECHTSCHAFFEN & MARKELL, *supra* note 82, at 299.

¹⁴² R. STEVEN BROWN & VALERIE GREEN, STATE ENVIRONMENTAL CONTRIBUTIONS TO ENFORCEMENT AND COMPLIANCE 51 (Ecos 2001).

¹⁴³ Robert J. Naiman et al., *Watershed Management*, in RIVER ECOLOGY AND MANAGEMENT: LESSONS FROM THE PACIFIC COASTAL ECOREGION 642-43 (Robert J. Naiman & Robert E. Bilby eds., Springer-Verlag 1998).

¹⁴⁴ Leslie M. Reid, *Cumulative Watershed Effects and Watershed Analysis*, in RIVER ECOLOGY AND MANAGEMENT: LESSONS FROM THE PACIFIC COASTAL ECOREGION 476-77 (Robert J. Naiman & Robert E. Bilby eds., Springer-Verlag 1998).

delegate responsibility to local leaders to meet certain goals.¹⁴⁵ The problem remains, however, of determining the source of pollution. Any individual leader not in compliance could simply blame the failure on someone upstream. In this instance, the cadre system of joint liability would serve well by establishing collective responsibility for a collective resource. Joint liability would theoretically incentivize the most cost-effective fixes, but would encounter significant commons problems.

Time is a more difficult challenge. Because evaluation systems include annual review and officials are rotated on short tenures to avoid localism, evaluation systems are best applied to short-term, localized problems and solutions.¹⁴⁶ Officials often rush to meet goals in name, rather than substance. This haste to meet performance goals has resulted in widespread falsification (as discussed previously), as well as reactionary and wasteful programs. For instance, to satisfy industrial growth goals, one county official directed each village under him to build a paper mill, making the completion a priority in the village leaders' evaluations. Each village built a mill, the official was promoted and rotated, and within five years, each mill was out of business.¹⁴⁷

As a result of the rotation system and brief tenure of officials, they are likely to invest financial and political resources only in quickly achievable goals. Just as the United States' Environmental Protection Agency first used the Clean Water Act¹⁴⁸ to address point sources and is only now beginning to attack more challenging non-point sources, Chinese officials will likely focus their attention on major point-source emitters because they are the easiest to find and fix.

V. BECAUSE THE CADRE SYSTEM IS UNDEMOCRATIC AND OPAQUE, THE CCP SHOULD INTEGRATE CITIZEN REPORTING TO INCREASE TRANSPARENCY AND KEEP OFFICIALS ACCOUNTABLE

This comment focuses on a results-oriented analysis. However, it is important to note that adoption of the cadre system operates in a context of a troubling, broader shift toward authoritarianism and CCP rule.¹⁴⁹ In embracing a political solution that operates within a closed system, the cadre

¹⁴⁵ Email from Carl Minzner, Ass. Prof. of L., Washington Univ., to Wyatt Golding (Mar. 8, 2010, 09:46 PM, CST) (on file with author).

¹⁴⁶ Edin, *supra* note 60, at 47-48.

¹⁴⁷ Minzner, *supra* note 9, at 101.

¹⁴⁸ Clean Water Act, 33 U.S.C. §§ 1251 *et seq.* (1972).

¹⁴⁹ See generally Dongsheng Zang, *Rise of Political Populism and Trouble with the Legal Profession in China*, 6 HARV. CHINA REV. 79 (2010).

system encourages officials to disregard citizens' legal rights. Particularly in the implementation of the One Child Policy, officials have committed atrocities in order to meet strict goals.¹⁵⁰ The cadre system further sacrifices citizen involvement and legal consistency in pursuit of those results. Doing so is not only undemocratic and contrary to Chinese constitutional principles, it is also risky because it alienates a potentially enormous class of overseers, and stakes governmental legitimacy on attaining water quality improvement. The cadre system focuses power within the party, but in doing so, also focuses responsibility. In addition, it educates citizens to engage in more and more disruptive protest in order to achieve change, which could pose a long-term threat to stability.¹⁵¹

A. *By Integrating Citizen Response, the CCP Could Maximize the Transparency and Effectiveness the Cadre System*

The cadre system, while inherently opaque, could easily be adjusted to allow greater citizen involvement. 'The seeds of public accountability already exist in an increasingly rights-conscious public, a newly legislated requirement to divulge water quality data, a complaint procedure, and an evaluation system based on those complaints. Unfortunately, that public voice and accountability has largely been stifled by the CCP's unwillingness to cede any challenges to its authority.¹⁵² While current evaluation systems consider public opinion in an annual "democratic appraisal meeting," only village leaders, lower officials, and leaders of key enterprises may attend such meetings.¹⁵³ The cadre system therefore largely operates as an invisible hand in governance.

Public outcry over water pollution already exists in China. Citizens have instead voiced their complaints through the Environmental Protection Bureaus' complaint divisions. From 1991 to 1993, EPBs reported that citizens registered 55,000 complaint letters and 80,000 in-person complaints, with ninety percent of those complaints relating to water or noise pollution.¹⁵⁴ In 2006, the government controlled English-language newspaper *China Daily* reported that more than 50,000 disputes and protests arose in 2005 over pollution, and complaints to the national environmental

¹⁵⁰ Jacobs, *supra* note 95.

¹⁵¹ Minzner, *supra* note 9, at 123.

¹⁵² Alford & Shen, *supra* note 126, at 420-21.

¹⁵³ Edin, *supra* note 60, at 43.

¹⁵⁴ MA & ORTALANO, *supra* note 97, at 71.

administration rose by thirty percent.¹⁵⁵ While the Administrative Litigation Law and the Environmental Protection Law include citizen-suit provisions, such suits are incredibly rare.¹⁵⁶

Many of the 55,000 complaint letters were submitted anonymously, evidence of continued fear of party reprisal.¹⁵⁷ However, a burgeoning environmental movement and the development of an increasingly large and attentive corps of “netizens” promises to heighten and broaden public outcry. The “spotlight pressure” of public attention is a proven means of pushing officials to environmental compliance.¹⁵⁸ Widespread criticism has successfully regulated spending in key policy areas, showing that the cadre system presently is at least minimally responsive to citizen complaint and protest.¹⁵⁹ However, such criticism is risky for citizens and generally only occurs as a desperate measure.

B. The CCP Should Exercise the Existing Statutory Authority and Petition System to Integrate Citizen Response

Article 19 of the LPCWP mandates that the national government publish national water quality standards and also the names of provinces that fail to meet the standards. It remains to be seen in the implementing regulations whether provincial leaders will focus the same publicity on city and county governments. This localized transparency would help to focus responsibility and identify areas needing increased agency resources, as well as providing better data and accountability to combat falsification.

The traditional avenue for citizen complaint in China is via petition to relevant authorities, under the *xinfang* system.¹⁶⁰ The *xinfang* system works in conjunction with the cadre system to direct accountability measures toward political, rather than judicial solutions.¹⁶¹ This approach allows great access, especially for the poor, but due to limited regulations and broad

¹⁵⁵ Jim Yardley, *Rules Ignored, Toxic Sludge Sinks Chinese Village*, NEW YORK TIMES, Sep. 4, 2006, available at <http://www.nytimes.com/2006/09/04/world/asia/04pollution.html> (last visited Feb. 18, 2011).

¹⁵⁶ MA & ORTALANO, *supra* note 97, at 71 (citing one successful example).

¹⁵⁷ *Id.*

¹⁵⁸ RECHTSCHAFFEN & MARKELL, *supra* note 82, at 310.

¹⁵⁹ Whiting, *supra* note 53, at 118.

¹⁶⁰ The *xinfang* system allows any citizen, even one without standing, to petition officials at a local, regional, or national level. While the system serves largely as an informational tool of the government, petitioners have learned to leverage local officials' interest in avoiding poor reviews by staging increasingly large and violent protests. See generally Carl F. Minzner, *Xinfang: An Alternative to Formal Chinese Legal Institutions*, 42 STAN. J. INT'L L. 103 (2006).

¹⁶¹ While the Administrative Litigation Law was implemented in 1990, it is underutilized due to fear of recriminations, expense of litigation, limited scope, and challenges of standing. See generally Song Bing, *Assessing China's System of Judicial Review of Administrative Actions*, 8 CHINA L. REP. 1 (1994-1999).

institutional discretion, rarely limits governmental power in a significant way.¹⁶² Under some evaluation formulas *xinfang* petitions of a certain size that reach higher-level officials result in score deductions.¹⁶³ Savvy protesters can threaten protest to leverage an official's desire to meet social harmony goals.¹⁶⁴ While this use of the cadre system can successfully motivate officials, structural problems remain that severely limit their ability to enforce environmental law. Like the cadre system, the *xinfang* system works to enhance the vertical movement of information within the government.¹⁶⁵

Publicity accompanied with political accountability could serve to create the Chinese equivalent of citizen-suit enforced environmental laws, within a political system. While China lacks an independent judiciary and tradition of legal challenge to the government, the party mechanism provides a powerful means of forcing regulatory action. In past incidents of significant water pollution, high-level officials have satisfied public outcry by firing officials.¹⁶⁶ These firings have resulted in higher water quality. Accountability structures and regular public disclosure of water quality standards could serve to codify and make consistent that practice, leading to political accountability to public opinion. The cadre system would be more powerful and more stable if the CCP took public accountability seriously and institutionalized procedures for consistently hearing and accounting for complaints. Such an approach is more realistic in an authoritarian system than robust citizen suit, but it could attain some of the same benefits.

VI. CONCLUSION

China's application of the cadre system to environmental law is a pragmatic use of political resources that could jumpstart regulation and improve the severe instances of pollution. However, it will only be successful if the political incentives lead to a shift in institutional priorities that results in enhanced enforcement capacity. Recruiting local officials as stakeholders in attaining water quality has a potential to facilitate that shift by creating a culture of environmental regulation and provide EPBs with political and financial backing.

¹⁶² Minzner, *supra* note 160, at 136. There are very relaxed versions of standing, but no right to hearing or redress.

¹⁶³ Edin, *supra* note 60, at 43.

¹⁶⁴ Minzner, *supra* note 160, at 143.

¹⁶⁵ *Id.*

¹⁶⁶ See, e.g., Yardley, *supra* note 155.

This comment recognizes that the cadre system inflicts serious procedural and substantive abuses of citizens' legal rights. Those concerns are real—it is imperative to develop an approach toward environmental protection that takes account of Chinese circumstances without accommodating them so completely as to surrender all possibilities of fostering improvement.¹⁶⁷

While much attention has been paid to the Chinese import of Western environmental regulation strategies, an incentive based system with personal accountability provides a compelling model for export. Local agency problems are endemic to every environmental enforcement regime, because national standards must be generic while local application is case-specific.¹⁶⁸ An evaluation system with concrete targets and public involvement represents a compelling compromise between the efficiency of a market-based incentive system and the standardization of the command-and-control system.

¹⁶⁷ Alford & Shen, *supra* note 126, at 419.

¹⁶⁸ JOEL A. MINTZ, ENFORCEMENT AT THE EPA: HIGH STAKES AND HARD CHOICES 126 (Univ. of Texas Press 1995).