

Evaluating the State Environmental Quality Review Act (SEQRA) Through a Case Study of Global Foundries

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Glossary

CEG: Center for Economic Growth
DEC: Department of Environmental Conservation
EIS: Environment Impact Statement
LFTC: Luther Forest Technology Campus
PDD: Planned Development District
SEDC: Saratoga Economic Development Corporation
SEQRA: State Environmental Quality Review Act

I: Introduction

Significance

By the 1990's, it was clear that New York State's historically strong manufacturing sector had declined significantly. Industry moved overseas in order to reduce production costs causing massive job layoffs and population decreases in the State. Politicians and economists realized that they needed to bring jobs back to New York, and started to look at the regional assets. Regional economic agencies saw potential growth in the industries of advanced materials, biotechnology, clean technology/renewable energy, homeland security/defense, information technology, and nanotechnology such as semiconductors and nanoelectronics (Tucker 2008). There was a strong focus on attracting semiconductor manufacturing facilities to New York because of the industry clusters these manufacturing facilities help create.

The initiative to bring silicon microchip manufacturing to New York started in late 90's, and was realized in 2006 with the contract from GlobalFoundries' to build a semiconductor manufacturing facility. Many hail GlobalFoundries as the beginning of an economic revitalization for the region. However, there are community members who question why the state of New York would spend 1.2 billion in tax payers' dollars to subsidize an industry to develop in forested land outside of the urban core, and in the county with the lowest rate of unemployment. As m

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helpful to refer to Appendix 6.3 on the SEQRA process. The scope of our capstone focuses mainly on the EIS that was required by SEQRA procedure for GlobalFoundries.

SEQRA is required for actions that need discretionary permits or licenses, use state or local funds, involve resource management plans, or pertain to policy regarding the environment. SEQRA defines the environment broadly as

“the physical conditions that will be affected by a proposed action, including land, air,

plants based in Singapore). Under AMD, the fabrication plant in Malta was their second, "Fab 2," but after the addition of the other fabrication plants, the Malta facility was renamed "Fab 8."

is to look at the cumulative environmental, social, and economic impacts of a project (DEC 2011). In order to determine the effectiveness the SEQRA process had on assessing the potential impacts of GlobalFoundries, we had to look at the cumulative impacts. We researched not only the direct impacts to the local community, the towns of Malta and Stillwater, but also analyzed the indirect impacts affecting the regional community. Our methods first consisted of reviewing the final Environmental Impact Statement (EIS) for GlobalFoundries and the Public Comment period as required by SEQRA. We then researched the projects known impacts through the literature to give us context for interviewing stakeholders. With this research base, we used stakeholder analysis to determine candidates to interview and conducted interviews with pertinent individuals.

2.1 Research and Stakeholder Analysis

Our approach, therefore, was to identify the complete impacts

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Stakeholder Approach, "a stakeholder is any group or individual who can affect or is affected by the achievement of an organization's objectives." (1984) With a working definition of stakeholder in place, we were then able to begin to distinguish potential stakeholders for a stakeholder analysis. A stakeholder analysis consists of two parts: "deciding who are the relevant stakeholders and then, conceiving a network to connect the stakeholders in the community" of development based on their role in relation to establishing GlobalFoundries in the region (Bryson 2004). Lastly, when identifying stakeholders, an early and diverse impression of development from an environmental perspective was the primary goal.

To address if SEQRA had successfully prepared the regional community for Fab 8 development, players from both the affected community and groups affecting the community needed to be interviewed to permit a fully comprehensive analysis. Using the context of knowing the EIS, boundaries for the stakeholder analysis were set to narrow the scope of our stakeholder

impacted by the new fabrication plant and ancillary development. These towns included Malta, Stillwater, Clifton Park, Country Knolls, Ballston Spa, Saratoga Springs, and North Greenbush (the original proposed site location for Fab 8).

Community Members

We interviewed Malta and Stillwater residents. These community stakeholders included concerned citizens from the region who attended the public meetings and had submitted comments during the Public Comment period and were in the Environmental Impact Statement. These stakeholders represent a first-hand look into a community's response towards development. We interviewed a group of these individuals to ask about what opposition GlobalFoundries faced in coming to the region. We also interviewed a representative from a local periodical, Saratogian, to obtain background information from a medium that is easily accessible by the public. The Saratogian representative also offered an opportunity to compare widely perceived public knowledge of GlobalFoundries' impact with impacts mentioned in the Environmental Impact Statement.

Regional Agencies

Regional economic agencies are largely responsible for bringing GlobalFoundries to Malta, New York.

GlobalFoundries

Lastly, and undoubtedly the most crucial stakeholder group we interviewed was GlobalFoundries itself. An interview was conducted with the Media Relation representative from GlobalFoundries. This interview, in particular, was vital to our stakeholder analysis in understanding how GlobalFoundries was going to affect the community environmentally socially, and economically. Bringing a wafer facility into the area requires a large amount of infrastructure changes, but also brings with it direct and indirect ancillary businesses and jobs. For example, chip manufacturing facilities need businesses such as warehouses for storage and companies performing mechanical maintenance to the facility nearby in case of unexpected repairs.

Just as an example of what we were able to glean from a stakeholder interview and how we were able to identify relevant themes, we would like to provide an analysis of a sample stakeholder interview and the information we were able to take away.

Our interviews began by talking to Lucian McCarty, a writer for the Saratogian, to expand our stakeholder list and to learn background information of public perceptions around the fabrication plant. McCarty mentioned the 1.2 billion dollar in tax incentives GlobalFoundries was receiving from the State and even the Federal government, provide us with important regional impacts such as predicting possible new jobs, housing options available to new workers, and infrastructure needs. Crucial pieces of knowledge obtained from our

Region's current strengths and future strengths should be marketable to "industries that were going to be growing and global in nature" (Rooney interview 2011).

New York had a strong history of innovation as home to one of GE's Research and Development centers and IBM, but the manufacturing base that was historically a dominant player in the region's economy was no longer a viable economic option for New York in a global economy. CEG and the Lally School of Business at the Rensselaer Polytechnic Institute (RPI) identified six key industries for the Region to pursue: "advanced materials, bio/life sciences,

Figure 1: This image reveals the range of development by GlobalFoundries in its Dresden site (Fab 1) transposed on the region to display the stretch of potential development. The purple spots represent industry assets and the yellow major urban areas. In Dresden, ancillary businesses grew out of industry clusters (assets)

the area. High job creation and cutting edge manufacturing technology are economic expectations GlobalFoundries is expected to provide to the region. The nationally recognized periodical Business Facilities went with a cover story on the development of GlobalFoundries in the October 2010 edition. Based on these estimates, GlobalFoundries' predicts that by "late 2012 more than 1,400 people will be employed at Fab 8, a number that could increase significantly if the foundry decides in coming years to ramp up to full capacity – 60,000 wafers per month utilizing the entire 300,00 square feet of the shell" (Rogers 2010). These jobs are specialized from engineering and technicians (mainly experienced international hires as of now), to Fab operators, who are generally local workers trained at regional community colleges.

Not everyone in the community is looking forward to GlobalFoundries and the anticipated growth. A community member opposed to the development in Luther Forest stated,

"Are we so desperate that we are willing to sacrifice Saratoga County's natural resources

quarterly basis so the state of NY raises bonds and then reimburses us for the costs” (Bullard interview 2011). Additionally, the tax rates will be on the market value of the property and not on the development value for the first ten years, which is incredibly cost-effective for GlobalFoundries.

Figure 2: Breakdown of tax incentive package by percent and value

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sale of water will be a huge revenue source for the county (McCarty interview 2011). Opinion author John W. Kraus of Saratoga Springs wrote recently in the Saratogian that the county “had the foresight to prepare for this requirement in advance. These revenues should allow the county to keep the property tax rate flat for years to come and continue to provide subsidy funding for the Maplewood Manor nursing facility” (Saratogian 2011). Utility companies, such as National Grid, were willing to build their own transmission line to Luther Forest Technology Campus knowing they would have a long-term regional partner/consumer. These massive utility incentives create huge sources of income for the region and will persist over many years.

GlobalFoundries

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These new high-tech workers will not only come from semi-conductor facilities in the US, but from international sites as well, resulting in changes of population demographics in the region. Aside from some of the negative impacts of the development, surrounding counties around Malta, NY are likely to see increased cultural diversity. This new diverse workforce being contracted to work for in Fab 8 comes from around the world including: Germany,

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effectiveness of the SEQRA process was not fully utilized resulting in its failure to document the



Figure 4: Saratoga County with location of Luther Forest Technology Campus marked. The campus borders rural towns but is off Route 9. Further ancillary development would most likely occur off of Route 9.



Figure 5: PDD Infrastructure Project Timeline showing all the necessary infrastructure changes needed to build Luther Forest Technology Campus

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6.1 Appendix: Stakeholders Interviewed/Contacted

Elected Officials

- Town of Malta
 - Anthony (Tony) Tozzi: Director of Building and Planning Department
 - Sophie Marossu: Town Planner
- Town of Clifton Park
 - Barbara A. McHugh: Community Development
 - John P. Scavo: Director of Planning
- Town of North Greenbush

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GlobalFoundries

- Travis Bullard: GlobalFoundries' Public Affairs and Communications Manager

6.2 Appendix: Interview Questions

Interview questions asked to major stakeholders involved in determining the influence of the development of GlobalFoundries Fab 8 microchip processing plant to the community (Malta and Saratoga Lake watershed), 2010-11. Questions were tailored depending on stakeholder.

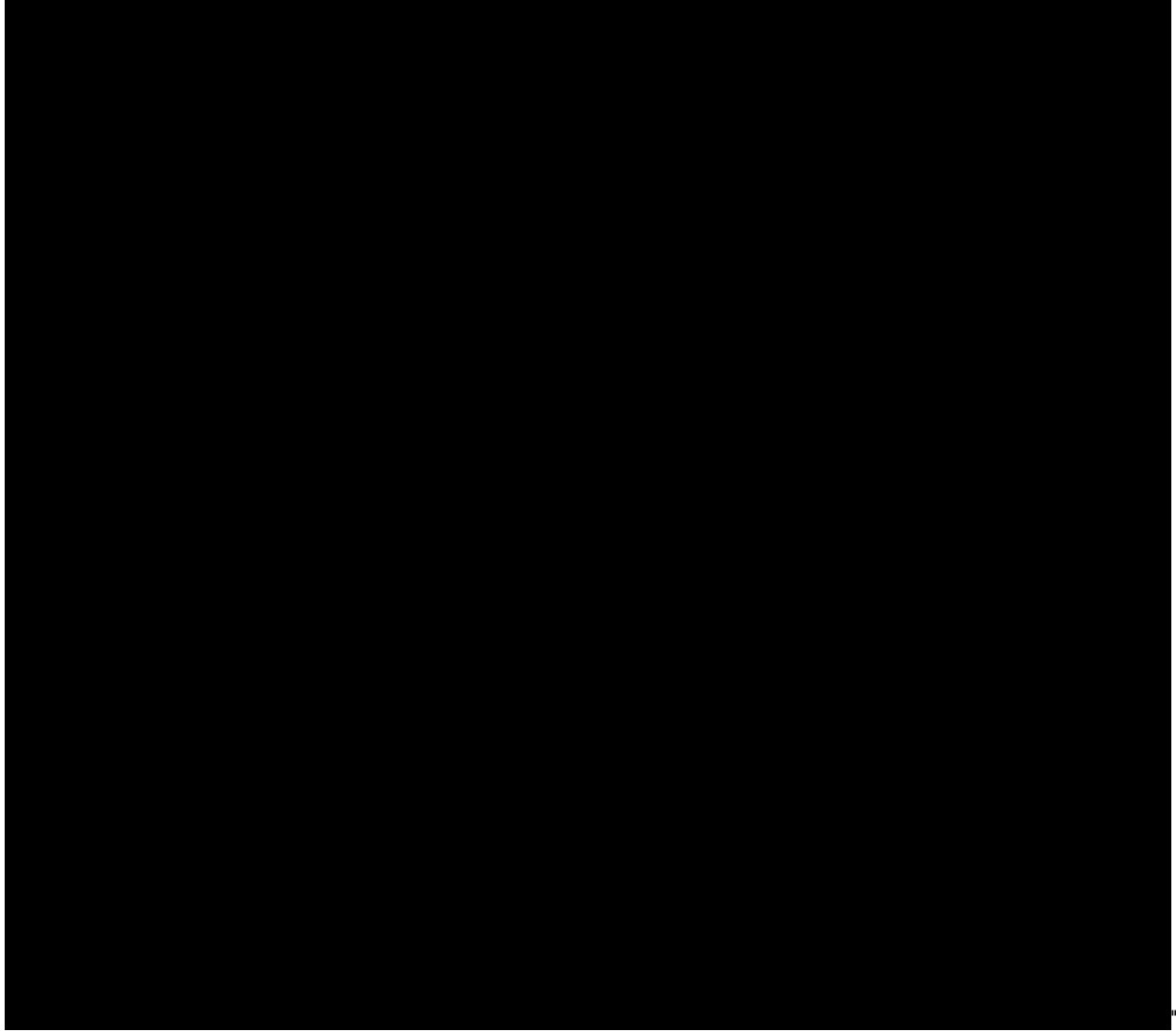
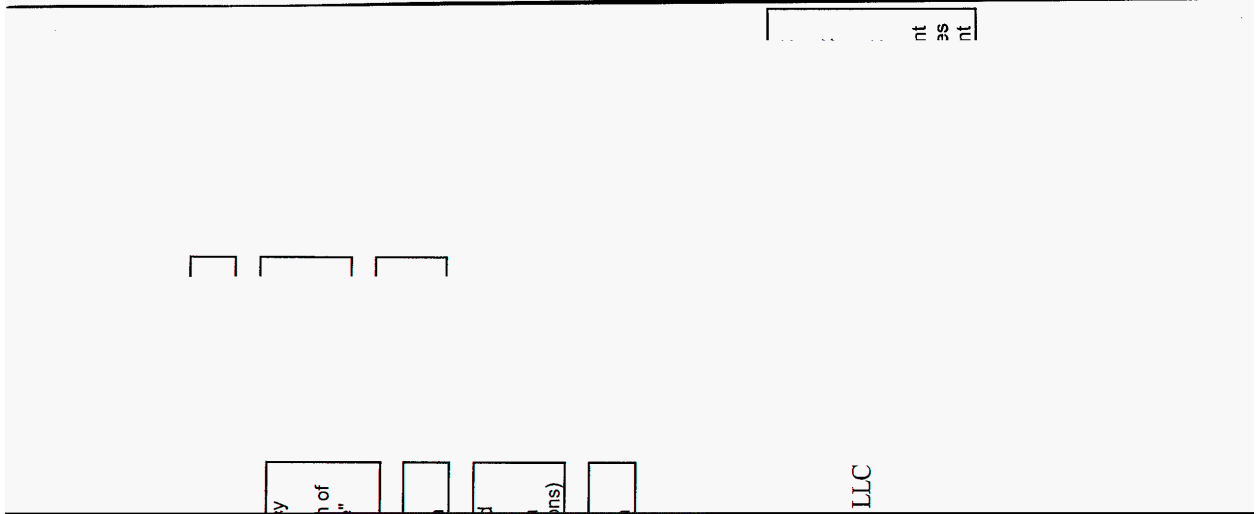
- What is your relation to Fab 8?
- Do you believe that the development of Fab 8 will change the Malta or Saratoga Lake community environment? If so, then how?
- Why, or why not, might Fab 8 have major environmental impacts on the surrounding community?
 - Do you think Fab 8 will change water consumption rates significantly for the area?
 - Where will Fab 8 draw its water from? Does this conflict with pre-existing water obligations to the local environment?
 - Do you think Fab 8 will change energy consumption rates significantly for the area?
 - Where will Fab 8 draw its energy from? Does this conflict with pre-existing energy obligations to the local environment?
 - Will these changes in consumption rates lead to higher utility costs for individuals living in the Saratoga Lake watershed community?
 - How else might the resource consumption of Fab 8 affect the local community? Environmental concerns?
- What types of jobs does Fab 8 offer?
- What are your perspectives on the new job availability potentially being created through the construction of Fab 8?
- Do you think these new jobs will affect life in Malta? If so, how might life be affected?
- Who will be coming to Fab 8 in search of these jobs (regional to international job interest)? What affect will these new workers have on the community?
- Will Fab 8 lead to changes in infrastructure (new roads, housing, schools, telecommunication, etc.) for Malta? Will community dynamics be affected in this way?
- Specifically, will bringing in people to the Malta community through new specialized jobs for the plant create a need for changes in infrastructure in the area?
 - Do you think the economic opportunities provided by the development of Fab 8 will lead to changes in public transportation? If so, what sort of changes?
 - Would new public transportation be required to accommodate for the changes in community infrastructure?
 - Do you think the economic opportunities provided by the development of Fab 8 will lead to changes in community housing? If so, what sort of changes?
 - Do you think the economic opportunities provided by the development of Fab 8 will lead to establishing new schools in area? If so, what sort of changes?

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- How might this be an opportunity for Malta to develop in an efficient, environmentally conscious way (smart growth)?

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