Supplementary
Submission
No 129a

THE TRANSPORT NEEDS OF SYDNEY'S NORTH-WEST SECTOR

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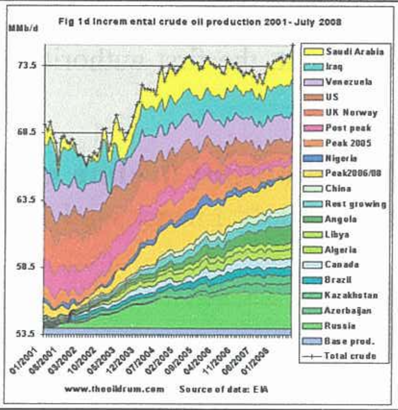
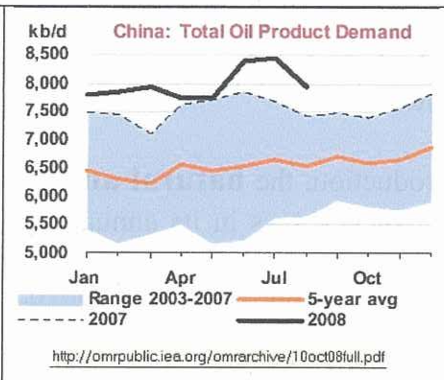
Supplementary submission to the Inquiry on North West Transport
Events and statistics since the original submission #129 by Matt Mushalik

The financial crisis, peak oil and what it means for transport planning in Sydney's North West

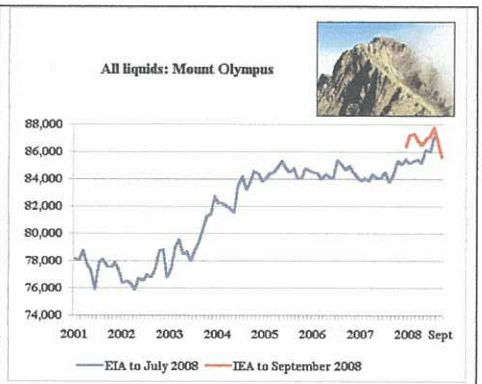
(1) The 1st phase of peak oil (2005 - 2008) is behind us. A growing world economy bumped into peaking crude oil production, pushing oil prices to levels never seen before. The highest monthly oil production so far was in July 2008, a spike on the bumpy production plateau since May 2005. It was the Olympic crude oil peak in which 80% of a supply surge between May and July went to China to avoid shortages while the world was watching the games. In August/September oil production went down after the attack on the BTC pipeline, the war in Georgia and hurricanes in the Gulf of Mexico.



Russia (green) peaked. Saudi Arabia (yellow) dropped 06/07



China bought 80% of an oil supply surge between 05-08/08



Olympic oil production peak July 2008 (all liquids versus crude oil)

(2) What would we have expected when peak oil is happening?

Rising oil prices	Happened
Problems in car-dependent suburbia	Subprime mortgage crisis was triggered by lenders trying to grow suburbia and exurbia against peaking oil production and rising gas prices
Car companies in trouble	Is happening
Shares of motorways falling	Is happening (more than index)
Air lines in difficulties	Is happening
Armed conflicts, oil wars	Iraq war, attack on BTC pipeline, war in Georgia about flow of Caspian oil
Statistics show peaking	Russia peaked, Saudi Arabia's swing role gone with production drops in 2006/07. When the giants peak, the whole system peaks
Recession after the peak	Is happening

So all the indications are there peak oil has happened.

What is peak oil? When rampant decline in existing fields (5 mb/d pa) can no longer be offset by new fields & new wells and enhanced oil recovery in old fields.

(3) OPEC will be reluctant to sell $60 oil:

"Oil producers are losing money because prices are falling," Ghanem [chairman of Libya's National Oil Corp] said. "We'd better keep the oil in the ground and not sell it because the international banks are collapsing, and we may lose our money there as well."
http://www.qando.net/details.aspx?Entry=9465

OPEC to cut oil output by 1.5 million b/d. **By OGJ editors**

HOUSTON, Oct. 24 -- The Organization of Petroleum Exporting Countries announced a 1.5 million b/d reduction to its oil output targets. The cuts, effective Nov. 1, would put total OPEC production at 27.308 million b/d from the 11 member countries that are bound by quotas.
http://www.ogj.com/display_article/343495/7/ARTCL/none/none/OPEC-to-cut-oil-output-by-15-million-b/d/?dcmp=OGJ.Daily.Update

Saudi Arabia –477 Kb/d can now "rest" its oil fields like in 1973/74; see Appendix C in Matthew Simmons' book "Twilight in the desert" http://www.twilightinthedesert.com/

Iran - 300 Kb/d
Kuwait - 200 Kb/d
UAE, Algeria, Libya more than -100 Kb/d each

(4) Update on rampant decline in existing oil fields. Oct 29, 2008

"Output from the world's oil fields is declining faster than previously thought, the first authoritative public study of the biggest fields shows.

Without extra investment to raise production, the **natural annual rate of output decline is 9.1 per cent**, the International Energy Agency says in its annual report, the World Energy Outlook, a draft of which has been obtained by the Financial Times."
http://www.ft.com/cms/s/0/0830883c-a55b-11dd-b4f5-000077b07658.html?nclick_check=1

(5) Treasurer reveals $40b hole in the Budget 5th Nov 2008

HAYDEN COOPER: $40 billion over the next four years, that's the true cost of the global chaos. As for Australia's cherished surplus, it's decidedly weaker too, down from $21 billion in May's Budget to just over $5 billion today.
http://www.abc.net.au/lateline/content/2008/s2411445.htm

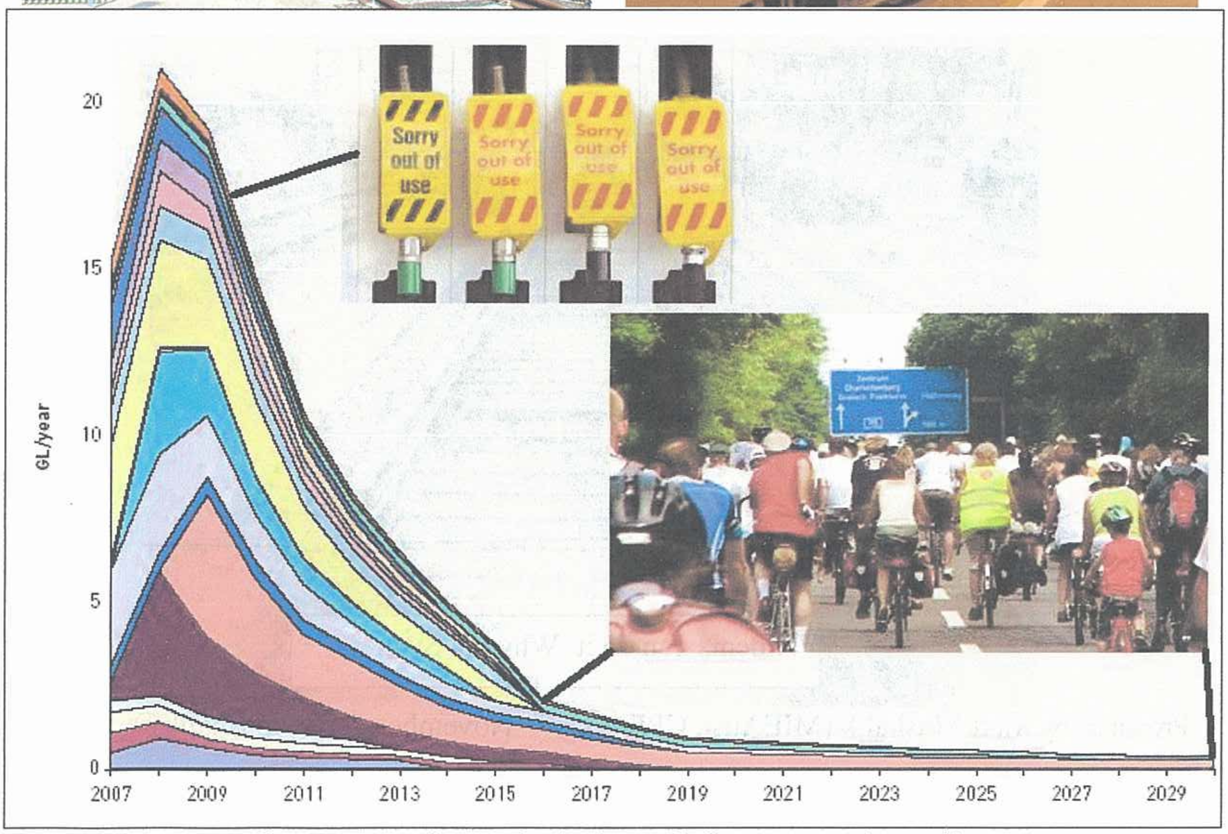
This means that Infrastructure Australia will have to spend every dollar very wisely. There is no more time and money for rail or metro tunnels. Electric surface rail on existing road corridors is the only solution but time is running out now.

(6) Upgrade of Victoria Road
This includes an **additional Iron Cove bridge which is unnecessary,** as traffic will decrease, not increase. Peak oil will solve the congestion problem when petrol rationing is introduced.
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2552

(7) Tunnel vision and its last stop, Rozelle
A $4 BILLION underground metro line with stations at Central, Town Hall, Pyrmont and Rozelle could be built with federal funds.
http://www.smh.com.au/news/national/tunnel-vision-and-its-last-stop-rozelle/2008/10/24/1224351543965.html
This will not help Sydney much at all. For $4 billion you could build 100-150 km of surface rail (above ground metro or light rail) in many parts of the metro area, also in the North West.
Buses will not be enough to replace all car traffic. All genuinely renewable energies produce electricity, not fuels. There will be diesel shortages; bio diesel will be needed in the agricultural sector itself. Compressed natural gas needs to be developed but current efforts are not sufficient.

Last chance to prepare for peak oil & global warming

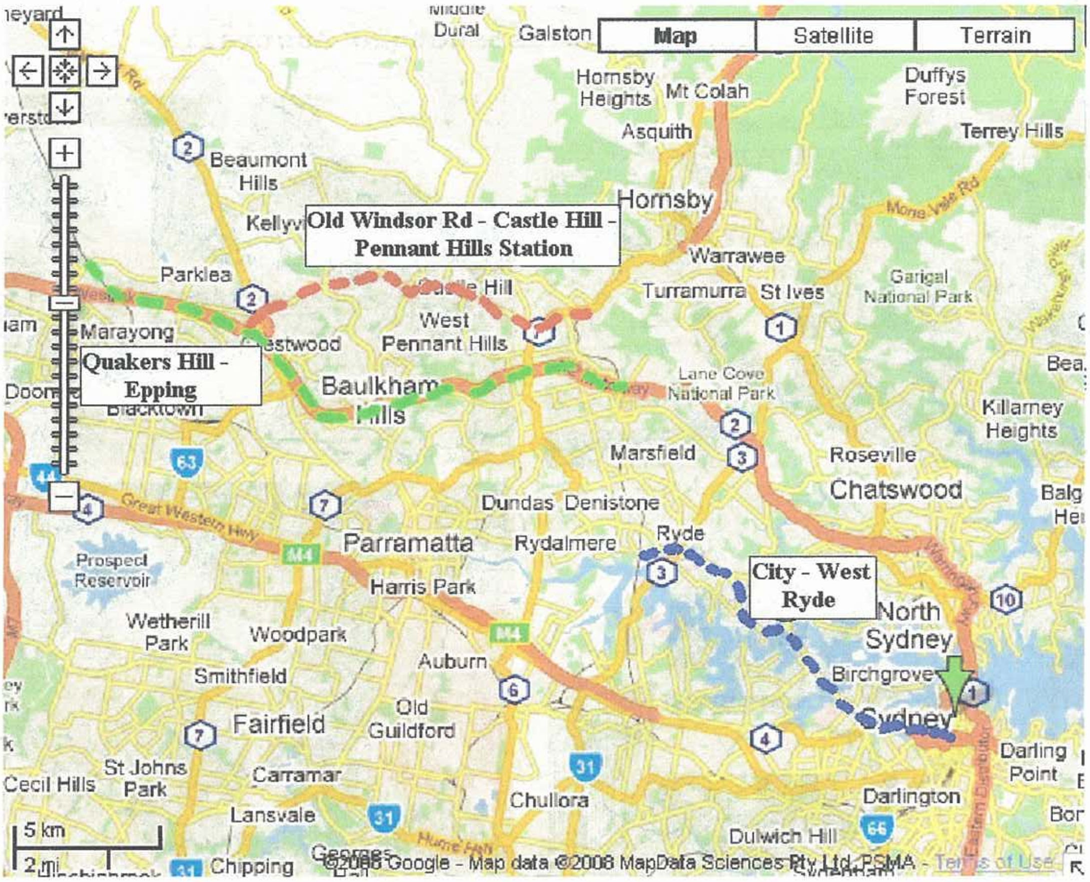
Submission to Infrastructure Australia

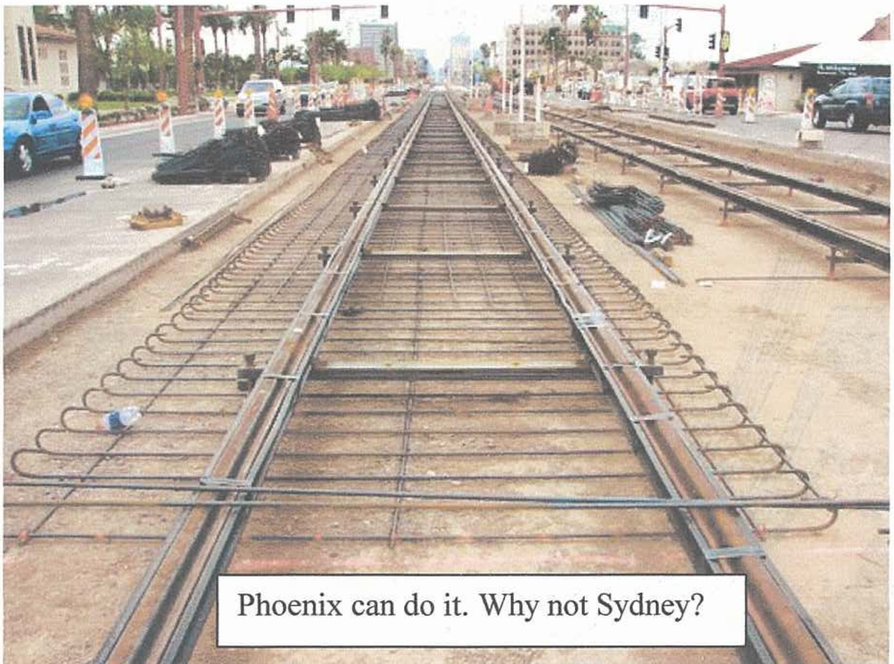


Cover page of my submission to Infrastructure Australia

Objective: REPLACE EXISTING LONG DISTANCE CAR TRAFFIC TO SAFEGUARD OVERALL FUNCTIONALITY OF SYDNEY

The job at hand is NOT to provide for growth (which will be difficult due to the financial crisis) but to replace existing car traffic (long distance commuting) with electric rail. NW metro can be replaced by: (1) Transperth model on M2 tollway (2) Surface metro on Victoria Rd (3) Light rail Quakers Hill – Baulkham Hills – Castle Hill - Pennant Hills station



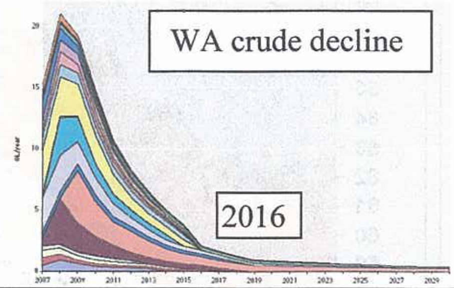


Phoenix can do it. Why not Sydney?

Supplementary submission #129 part 2 to the Inquiry on North West Transport

QUESTION (hearing day 7/11/2008): Which priorities for action would you recommend?

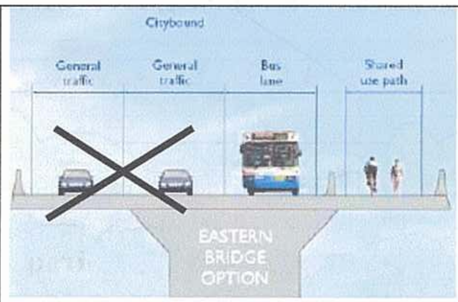
ASSUMPTIONS:
2010: oil import crunch including diesel shortages, priority use of diesel for food transport and bio diesel in the agricultural sector
2012: (half way down the WA crude decline) beginning of end of long distance commuting by private car
Current road congestion problem will be solved by peak oil. Oil decline too steep, car loans difficult to get, clean primary energy not available: no transition to other cars in millions.



ANSWER:

(1) All new buses to run on compressed natural gas (CNG); all bus depots to have natural gas supply; retrofit diesel buses to CNG if technically feasible; for the rest of the diesel fleet provide diesel storage facilities in bus depots. Truck fleets of Councils also need to be converted to CNG. Synergies can be had if this is coordinated. Diesel depots for ambulances, fire brigades etc. The Essential Services Act (1988) will not work when public filling stations are empty.

(2) Mini budget
Do not build an additional Iron Cove bridge with 2 more car lanes. These will not be needed as fuel rationing will reduce traffic. Well-policed T3 and T4 lanes for commuters will become the norm.

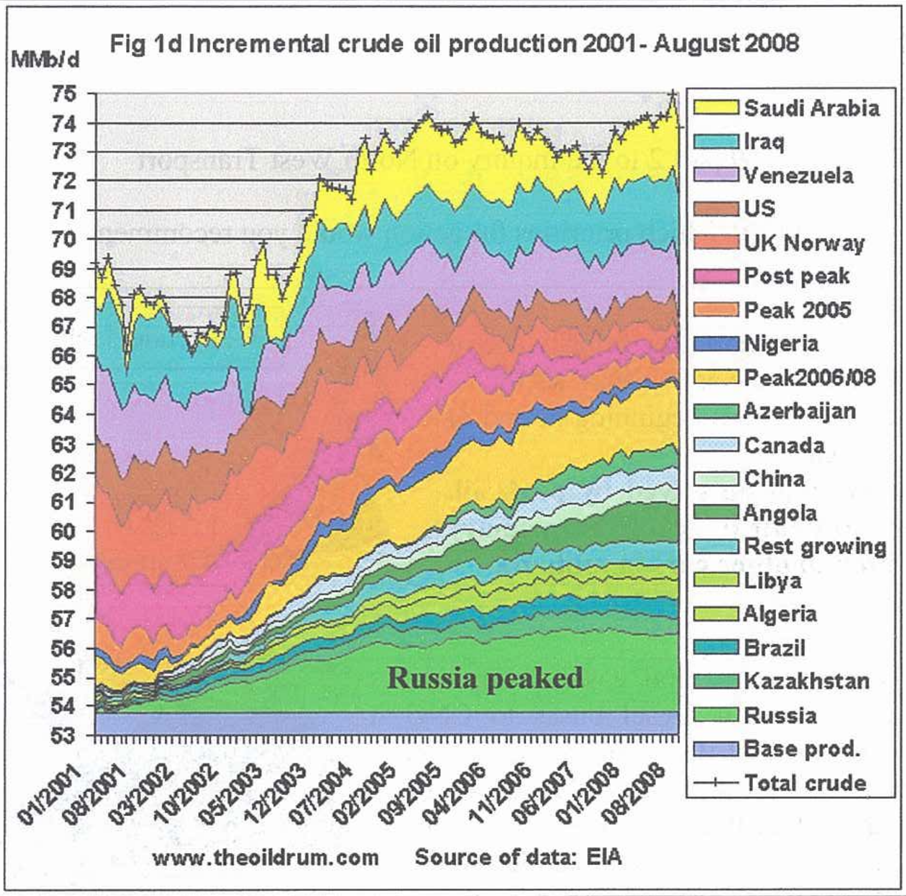


Anzac bridge during oil crisis

(3) State government to re-negotiate all Boot agreements with toll-way operators so that they can implement a Transperth solution on their road corridors. Toll-ways will come into financial problems when the Federal government will be forced to introduce fuel rationing for equity reasons. **They have to develop a new business model** with electric rail as mass transit by private car comes to an end. Finance would come from superfunds, who have invested in toll-ways and who have an interest to rescue them.

(4) RTA to plan surface metro or light rail on all major roads. Many different solutions are possible.
For a start, funds saved from (2) above can be used for a CBD – Ryde surface metro (100 m long trains)
Infrastructure Australia should fund a continuous roll-out of light rail on an annual basis. The $4bn Rozelle mini metro is too expensive (financial crisis, budget surplus melting away). Many more light rail kms can be built with the same funds.
San Diego >>>

Update with data from 7/11/2008: EIA International Petroleum Monthly http://www.eia.doe.gov/ipm/



The crude oil peak started in May 2005 at around 74 million barrels/day

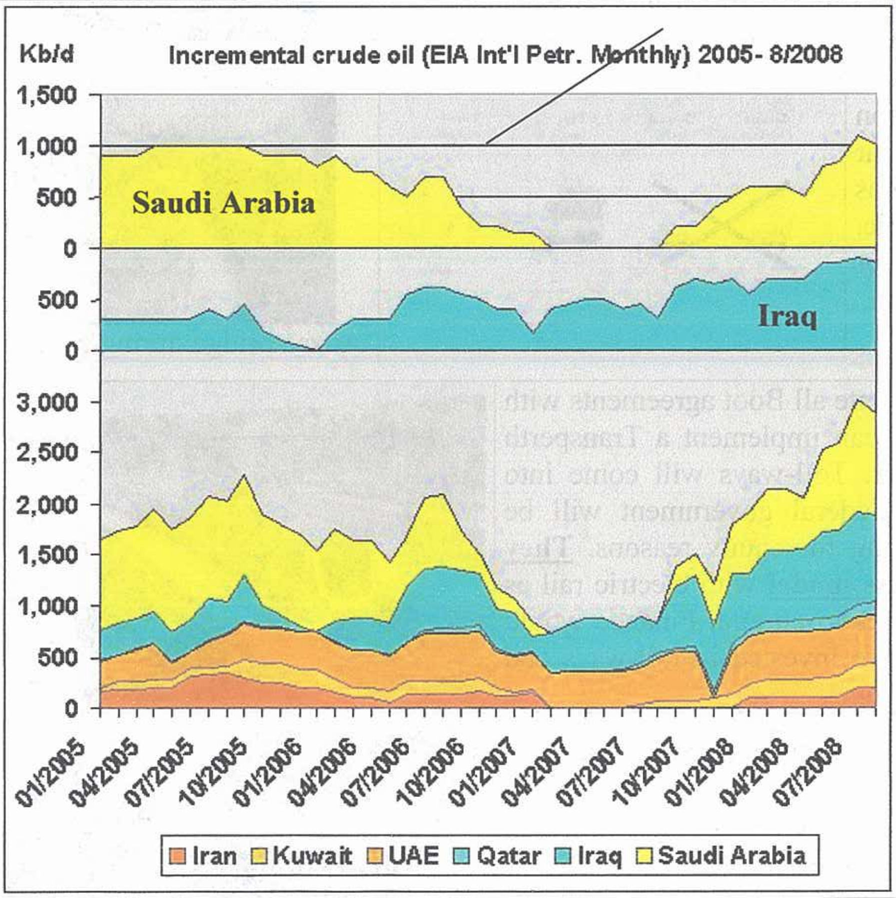
The 1st phase of peak oil ended in July 2008 with an Olympic production spike.

From now on production will be limited by decreasing demand (as a result of the recession) and the availability of credit for the development of new and old oil fields by nationalized oil companies whose revenue is used to support budgets (e.g. Mexico, Venezuela, Iran)

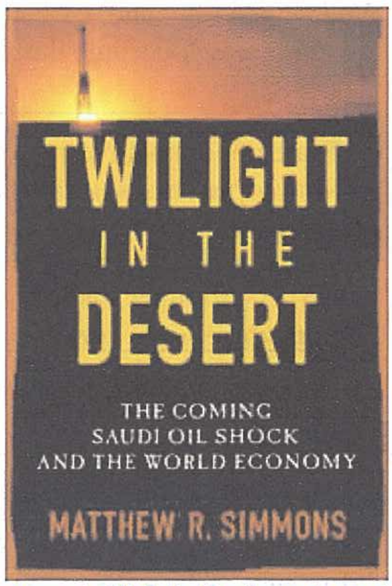
The supply-demand equation has fundamentally changed.

OPEC will try to reduce production to lift prices.

Peak of hitherto growing countries is shaping up.



Saudi Arabia lost its role as swing producer in 2006/07. In a period of booming economies and high oil prices production dropped by 1 mb/d. Read:



www.twilightinthedesert.com/

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