

---

# 3

---

## Organisation ... and Reorganisation

---

**Post-war reconstruction led to the creation of a government agency whose sole purpose was to promote economic development through the use of the State's water resources. Like the old, dependable axe that had two new heads and five new handles, the new entity served the State for the next half century.**

In 1946, the Government of the day decided that all the water resources components of the Department of Lands warranted a Department of their own: actually, not quite all, for the urban water supply components went to the Department of Local Government. Thus was created the Irrigation and Water Supply Commission, or the IWS by which title the function is still popularly known in some pockets of Queensland today. The responsible Minister was Thomas A Foley.

The appointment of Commissioner of the new Department went to Thomas A Lang. Tom was a senior man in the State Rivers and Water Supply Commission in Victoria.<sup>1</sup> He brought with him the knowledge and energy required to set up the new Department. Clearly, he would have had some difficulties in his new post as the previous Commissioner, CE Parkinson, was appointed as his deputy.<sup>2</sup> Although Parkinson and the Public Service Commissioner had many months of warning of the arrival of Lang, no provision had been made for an office for him when he arrived in Brisbane in August 1947. Parkinson refused to shift from his office (interesting, in view of his prior treatment of Grant Thompson) and the result was from day one, there was no co-operation between the new Commissioner and his deputy. Had the two operated and worked together they would have become a powerful and successful team. Lang, aged 38, was a brilliant academic and a skilful research and design engineer

## WATERY SAUCES

and Parkinson, aged 61, had an exceptionally extensive knowledge of Queensland and was possibly Queensland's most experienced construction engineer.<sup>3</sup>



1947 Christmas card

This state of affairs was presumably untenable and 'Parkie' was redeployed as Director of Stock Routes Construction in 1949 until his retirement in July 1954. The Annual Report notes his retirement without any semblance of a plaudit.<sup>4</sup>

Harold Mortley, who had been part of the former Sub-Department, was appointed Chief Engineer and Harold Buckle was appointed as Secretary. The Branch structure put in place at that time was to remain basically unchanged for many years: Project Planning (Senior Engineer Harry Hiley); Water Resources (Senior Engineer FJ Calvert); Artesian & Stock Water Supplies (Engineer and later Senior Engineer GD Brown); Rivers & Streams (Senior Engineer FH Bottrell); Irrigation & Rural Water Supply (Executive Engineer GE McDowell); Mechanical (Senior Engineer TJ Munro); Construction (Executive Engineer JC Trotter); and Design (Senior Engineer vacant following the early resignation of NJ Butler).<sup>5</sup>

JC Trotter (usually referred to as 'JC'<sup>6</sup> but known as Jim to his more intimate friends) left to become a senior engineer with Thiess Bros, whose main business at that time was developing an open-cut coalmine at Callide. Frank Bottrell took his place. 'Bot'



Thomas A Lang

was a flamboyant character who raced horses and subsequently founded a construction company with Wally Anderson, also an engineer with the Commission. A weir on Burrum River was one of their projects.<sup>7</sup>

On Bottrell's resignation, he was replaced by AN (Archie) McIntyre, a former engineer with Hornibrook Constructions on jobs including the Hornibrook Highway. Archie informed Bernie Credlin that before he joined the Commission he had been headhunted by a prominent construction company, but when one of the principals queried one of his designs as being too conservative, he resigned. The company prided itself that none of its staff ever resigned and sent an agent to persuade Archie to withdraw his resignation, subject to acceptance of his original design and higher salary. After withdrawing his resignation, Archie was dismissed, so the company's record of no staff resignations was maintained.<sup>8</sup>

## ORGANISATION ... AND REORGANISATION

Bernie Credlin considered Arch McIntyre to be technically one of the best engineers he ever worked under. *His major strength was his dedication to making young engineers think as engineers, to work things out for themselves in sound scientific terms. His crusades for common sense design compatible with practical construction techniques led to monumental arguments with Norm Butler, Chief Designing Engineer. On the debit side he had an uncontrollable urge to write ironical or even sarcastic memos to field staff criticising aspects of their work. While these were hilarious to the casual reader they were often deeply offensive to the target.*<sup>9</sup> On one occasion, he bawled Bernie out over a minor matter in full hearing of a large gang of workers. Bernie told him he didn't have to take that sort of unprofessional conduct and drove off, leaving him to hitch a lift back to the office with a gravel truck.<sup>10</sup> For all that, Bernie was on very amiable terms with Archie, who was a visitor to his home in St George.

It proved particularly difficult to recruit adequate staff, even though money was no object. The staff complement had grown from 92 (63 professional and 29 administrative) in July 1947 to 219 (154 professional and 65 administrative) by July 1949, but still fell a long way short of the total required of 344 professionals and 106 administrative.<sup>11</sup> The financial situation was vastly better than in the pre-war years when everyone had had to scrimp and save.<sup>12</sup> On one occasion, Tom Lang was presented with a requisition for six new utilities, already bearing the other two necessary signatures. He crossed out the 6 and wrote 12.<sup>13</sup>

In order to redress the staffing needs of the future, scholarship and cadetship schemes were introduced in the early 1950s. Many future leaders of the organisation were scholarship holders: Tom Fenwick, Malcolm Pegg and Lee Rogers among them.<sup>14</sup> Post-graduate scholarships were also awarded.<sup>15</sup>

Following the redeployment of Parkinson, the new Assistant Commissioner was Fred Haigh, also of Victoria, and a man destined to have an enormous impact on both the Commission and rural Queensland. Fred had originally joined the Commission as Senior Irrigation Engineer and had rapidly been promoted to Deputy Chief Engineer.

Frederick Bruce Haigh was born in a Melbourne suburb, the son of a blacksmith and wheelwright. Through economic need, he went to work at 15 in the survey camps of the State Rivers and Water Supply Commission. Such was his interest in engineering and his determination to be qualified that he studied far into the



*Fred Haigh*

## WATERY SAUCES

night by the light of a kerosene lamp. During World War II he served with honour in the Royal Australian Engineers, at home, in New Guinea and in New Britain. The citation to his MBE, awarded in 1956, ended with “In addition to the war service, his loyal, continuous exemplary service over the past ten years has been a magnificent example to all personnel serving with him, and has been an invaluable contribution to the training of Citizen Military Force soldiers”. In 1970 his standing in the engineering profession was recognised by his election as President of the Institution of Engineers – “an honour not accorded to a Queenslander for almost two decades”. Such was the way in which he gave himself to the State of his adoption, and such was the way in which he was received.

Fred was an incredibly hard worker, and expected his staff to work hard also. While he was intolerant of sloppy work, his greatest anger was reserved for people who didn't make serious attempts to achieve satisfactory results. Bernie Credlin recalls *he was far less angry, even tolerant, when a 'fair dinkum' attempt to do a job failed than when an officer didn't even try.*<sup>16</sup>

At the time of Fred Haigh's appointment, Harold Buckle was appointed Assistant Commissioner, Administration.<sup>17</sup> Harold had worked for the Auditor-General's Department and his work on a Main Roads Department audit so impressed the Commissioner JR Kemp, that he appointed him Chief Accountant. In 1947, Harold became Secretary of IWSC and in 1949 Assistant Commissioner. He was extremely proud of the Public Service and most of its officers and demanded, and got, high standards of work and conduct. He retired in 1963 and died in 1995 at the grand old age of 95.<sup>18</sup>

The position of Secretary remained vacant until 1950 when DF (Don) Erickson was appointed.<sup>19</sup> Don held the position until March 1954 when he was tragically killed. AO (Alec) Morris succeeded him in the post,<sup>20</sup> remaining until 1962 when he joined Main Roads Department and was succeeded in turn by RA (Bob) Adamson.

Alec Morris was completely unflappable, although John O'Shea used to wonder how he coped. Years after they had both left the Commission, John asked him how he had dealt with the mountains of material that reached his In-tray. *Alec said, "It was easy. Every Friday afternoon I used to empty the In-tray into the Out-tray. And you know, half the stuff never came back." I don't know whether this was true, but it's what he told me.*<sup>21</sup>

In 1948-49, the Commission had District Offices in Cairns, Winton, Theodore and St George.<sup>22</sup> By 1952, this network had been significantly expanded with offices at Mareeba, Rockhampton, Longreach (with a sub-office at Cloncurry),<sup>23</sup> Theodore, Charleville, St George and Goondiwindi with a Project Office at Clare.<sup>25</sup>

## ORGANISATION ... AND REORGANISATION

Tom Lang did not remain long as Commissioner. Apparently he had clashed with Sir John Kemp, by then Co-Ordinator General. Sir John was a hard taskmaster and had the ear of Government.<sup>24</sup> In November 1949, Tom Lang resigned to take up a post in the Snowy Mountains and later went to the United States of America where he remained for the rest of his life. He died in San Francisco on Christmas Day 1993.<sup>25</sup>

His successor was William Hogarth Robertson Nimmo, a distinguished engineer who had served the State in a number of important roles, including Chief Engineer of the Stanley River Water Board which had constructed the State's first major dam project – Somerset Dam – for Brisbane's water supply and flood mitigation. In 1949 he was looking forward to retirement, but was persuaded by the Government to fill the unexpected vacancy. Bill Nimmo was a quiet, scholarly gentleman who, although remaining largely invisible to the staff,<sup>26</sup> had a lasting influence on the standard of work in the Commission and on the progress of water engineering through his clear thinking and meticulous analysis of problems. He served with distinction until his retirement in February 1955 at the age of 70. His association with the Commission continued, however, for some years as a consultant to the Government, in which capacity many technical problems were passed to him for his assessment and valued advice. He also served as Chairman of the Border Rivers Commission. This role is further discussed in Chapter 16. He was awarded the University of Queensland's first full Doctorate of Engineering in 1964, based on his submitted 56 published papers and reports.<sup>27</sup>



*Bill Nimmo*

Following Bill Nimmo's retirement, Fred Haigh was promoted to Commissioner. Fred was a big man and a larger than life character. Fred was everywhere.<sup>28</sup> Typical of him was his annual address to the troops on Christmas Eve, which he made standing on a drafting table in the design office. No successor ever achieved the same effect.<sup>29</sup> Fred was a graduate of the School of Military Engineering along with Gordon McDowell, Frank Learmonth, George Pearce and Len Redmond.<sup>30</sup>

Bill Eastgate recalls that Fred Haigh was extremely autocratic. *I was organising a conference for the Water Research Foundation and made an appointment to see Fred. I asked, "How's your paper going?" He saw that as impertinence and questioned my temerity for asking him.*<sup>31</sup>

In 1960, Fred Haigh was Chairman of the Queensland Division of the Institution of Engineers (and later, like his predecessor Bill Nimmo, President of the Institution) and also chaired the committee organising the annual IEA Conference in Cairns –

## WATERY SAUCES

the first time outside a Divisional headquarters. Alan Wickham, who was Conference Secretary, recalls that the conference was organised with military precision and attention to detail. *Despite the tropical heat and some overcrowding of facilities, the conference was a resounding success.*<sup>32</sup>

Col Taggart considers that Fred Haigh was an exceptional engineer but a poor manager. *He didn't appreciate that you got better results from officers if they were treated with encouragement and respect.*<sup>33</sup>

Fred Haigh's Deputy Commissioners were Harry Hiley (Engineering) and Harold Buckle (Administration). Harry was another extrovert with an excellent engineering brain. Annually, Harry would make a tour of southern universities, as Lang had done before him, extolling the virtues of Queensland and the Commission. He was thus



*Commissariat Store in William Street*

responsible for the recruitment of a number of new graduates including Graham Jobling, Doug Flanders, Bill Souter and Peter Gilbey. Harry first became a teacher of trade subjects, but studied at night for his Diploma of Mechanical and Electrical Engineering. He joined the old Commission in 1933 just before it became a Sub-Department. He served in the Commonwealth Construction Corps during the war. He returned to the Sub-Department as an irrigation engineer and became Senior Engineer Project Planning in the new Commission in 1947, Deputy Chief Engineer in 1949 and Assistant Commissioner in 1955. During his 14 years in this position Harry

played a significant role in the development and expansion of the Commission. During the more turbulent moments of 'Parkie' or Fred, Harry had the ability to calm the waters. He was strongly supported by his clerks Viv Perrett and Bill Duncan, who were well known by all the staff because of the favours they were happy to grant.<sup>34</sup> By 1969, his health had failed and he was sidelined to the position of Chief Engineer to the Commissioner until his retirement in December 1971. His 'Cousin Tom', Sir Thomas Hiley, former Deputy Premier and Treasurer, spoke glowingly in his funeral oration of his contribution to the development of Queensland.<sup>35</sup>

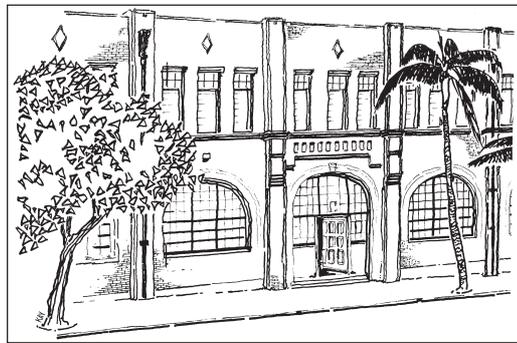
**A**t the time of the formation of IWSC, accommodation was provided mostly in the Executive Building next to Queen's Park. The building later became the Lands Administration Building and then the Conrad Hotel, operated in conjunction with the casino that now occupies the old Treasury Building which housed former colleagues who had transferred to the Department of Local Government. Those who worked there can still identify where their desks were. Norm Rossi's work area is now a security

## ORGANISATION ... AND REORGANISATION

office in the hotel and his desk site is now occupied by a lift. Rodger Cowell is not at all sure that he wouldn't prefer the present gaming table to his former desk in the Treasury building.

As more staff were recruited, there was never adequate room in the Executive Building. On one occasion, Charlie Ogilvie returned from a trip to find he had no desk. Not one to be deterred by obstacles big or small, Charlie set up office on the balcony overlooking George Street. He put two chairs a small distance apart, scrounged a sheet of plywood about 4 feet by 3 feet and placed this on the chairs with judiciously placed rocks as counterbalances. Another spare chair and numerous rocks for paperweights and Charlie was in business without fuss, bother or angst. This was his work place for several weeks until space became available.<sup>36</sup>

The building's capacity was stretched at the end of 1946, when the first university graduands took up duty in anticipation of the Department's expanding role. Bruce Moore, Nev Weller and Alan Wickham started as Temporary Assistants in even more temporary quarters – some small tables in the musty old library.<sup>37</sup> Others were accommodated elsewhere. Warren Lane was housed in the Commissariat Store, the oldest surviving public building in Brisbane. He is not convinced that any renovations had occurred between its construction in 1829 and when he worked there in the 1950s and '60s. Bevan Faulkner also worked on the ground floor of the Commissariat Store with State Archives occupying two lower floors. Access was simple, so on occasion he could look up the records of Bradman's innings and other matters of interest.<sup>38</sup>



*The Courier-Mail Building in William Street.  
Drawn by Bob Kay – Aquarius March 1979.*

In 1950, the Irrigation and Water Supply Commission was rehoused in the Courier-Mail Building on the corner of William and Margaret Streets. This had been the newsprint storage area for Queensland Newspapers. According to popular rumour, it had been condemned, and what better use would there be for a condemned building than government offices? Certainly, the accommodation left a lot to be desired. Norm Rossi considered it 'a dreadful place' and many others agree. It did, however, have good weather control with heaters and fans. When they broke down – as they always did – Works Department repaired the fans for the winter and the heaters for the summer.<sup>39</sup>

One Monday morning in 1967, staff arrived to find the design office awash with rainwater. Norm Butler asked, somewhat rhetorically, what should be done – to

## WATERY SAUCES

which Ian Ferrier replied, "Evacuate." After a couple of weeks Designs was relocated in temporary premises until repairs were effected. Apparently the roof trusses had been eaten out by termites. This incident did not result in achieving the popular ambition of being relocated next door in what became the new Executive Building.<sup>40</sup>

At one stage, a repairman from Public Works literally dropped in through the ceiling over Alan Wickham's office. This took an incredibly long time to repair because Australia had gone metric and the new AC sheets were about 15 millimetres narrower than the old imperial ones. The workmen had to cut and place narrow strips to fill the gaps.

Working hours were rigidly controlled by the ringing of a bell. It was rung religiously every day on the second of 9.00 a.m., 10.30 a.m to 10.40 a.m. (morning tea), 1.00 p.m. to 1.45 p.m. (lunch), 3.30 p.m. to 3.40 p.m. (afternoon tea) and 5.00 p.m.<sup>41</sup> It was pushed on the second, every single time. And just before he retired, Senior Clerk Jimmy Pill even granted Barry Mewburn the honour of letting him ring the bell. But one day, it was decided that the bell didn't need to be rung any more and it never was again.

According to John Ward, *Col Hazel read an In-Flight magazine containing Drake Consultancy's business tips. This article said if you want to destroy all the enthusiasm of your staff, make sure you ring bells and make sure you keep them sitting down. I know that Col, in his usual fashion, made sure that as many people as possible in the right places saw this. I think the Department can thank Col for the bells going.*<sup>42</sup> People continued to work, conceivably even a little more because they were not waiting for the bell. The bells indelibly instilled habits: to this day, despite the lack of regulation, the old times for smokos and lunches are generally observed.<sup>43</sup>

Every afternoon there had been people lined up near the door just before 5 p.m. No one would leave, but they were all lined up ready to go.<sup>44</sup> In the mornings, Jimmy Pill or, later, 'Nobby' Clark would rule the line at 9.00 so that all latecomers could be identified and, if persistent, dealt with.<sup>45</sup> Heather Clarke (nee Murdoch) tells of Jimmy standing in the street for her to arrive (late) and ruling the line after her.<sup>46</sup> It was sometimes possible to get away with penning OTS (omitted to sign) and if one had to go out during working hours (a risky business) sometimes UPB (urgent personal business) would serve as an excuse.

Eventually, Flexitime was introduced with fairly complex rules about times of attendance and allowable times off. For example, only half days were allowed and they couldn't be on consecutive days. Some people went rapidly to minus 14.5 hours (the maximum allowable) and stayed there. The scheme was later modified to allow even greater flexibility and it would probably be fair to say that while some people abused

## ORGANISATION ... AND REORGANISATION

IRRIGATION AND WATER SUPPLY COMMISSION - BRISBANE TELEPHONE EXTENSION DIRECTORY  
GENERAL NUMBER 240717 - DIRECT DIALING TO ANY EXTENSION 24 PLUS EXTENSION

JUNE 1974

COMMISSIONER	ASST. COMM'R (ENG)	ASST. COMM'R (ADM)	CH/E SPECIAL DUTIES	CH. INV'N ENG'R	SECRETARY
F. B. BAIGH 7313	F. M. LEARMONTER 7316	H. McL. BEAL 7312	D. BEATTIE 7340	B. L. CRELLIN 7311	G. G. TAGGART 7310
COMMISSIONER'S CLERK	DESIGNS	MECHANICAL	PROPERTY BRANCH	STORES & SUPPLY	TRAINING OFFICER
C. YOUNG 7315	A. WICKHAM 7336	K. HITCHCOCK 7326	A. OTT 7342	G. JOHNSON 7350	J. PASHEN 7348
ACCOUNTS	N. ROSSI 7331	H. OCHERT 7325	R. LIDDELL 7343	S. Bailey 7351	TRUNK BOOKINGS 4000
W. BRANNELLY 7237	A. Bright 7332	R. Afflick 7324	S. Elms 7308	M. Callahan 7355	TYPING POOL
K. WATSON 7235	Draftsmen 7333	R. Barff 7320	R. Gomersall 7228	J. Crutcher 7356	M. Vivers (Hrs) 7304
P. Bennett 7239	R. Doyer 7332	C. Bode 7324	E. Robinson 7228	D. Krnjacki 7352	UNDERGROUND & S.W.
A. Bugeja 7230	Engineers Gen. 7335	L. Brace 7259	R. Walker 7314	D. Manson 7354	W. SHARP 7257
R. Marshall 7231	R. MacArthur 7332	G. Burton 7392	RECORDS	L. Steele 7357	O. WITTE 7254
V. Milinkovic 7231	P. McMahon 7338	Draftsmen 7320	F. KERSWELL 7367	P. Thompson 7353	W. Bellion 7250
J. Ratajczak 7232	K. Nutt 7330	A. Genito 7321	D. BARNETT 7367	T. Warland 7366	P. Cochrane 7244
D. Rowley 7232	L. Rogers 7330	J. Hastie 7323	File Locations 7368	SURFACE WATER	J. Connolly 7246
V. Kullidge 7236	R. Russo 7330	J. Henderson 7390	File Attech'ts 7369	H. STARK 7387	E. Davis 7242
A. Serek 7232	ENQUIRY COUNTER	D. Hughes 7320	RIVERS & STREAMS	J. WARD 7386	J. Curry 7258
T. Small 7230	S. ROSSI 7346	C. McLeod 7391	G. PEARCE 7370	N. Ashkanasy 7269	W. Day 7253
L. Stone 7231	I. Rankin 7392	J. Myers 7320	R. FOX 7263	J. Baker 7216	Draftsmen 7251
J. Walls 7236	GENERAL & CLERICAL	P. Read 7320	I. Barr 7377	W. Baturu 7219	C. Hazel 7252
ADMIN. OFFICER	A. PAYNE 7302	J. Russell 7208	B. Brogan 7377	Clerk 7385	D. Hooper 7248
C. LLEWELLYN 7314	W. White 7303	B. Truss 7208	W. Burnham 7371	R. Denham 7216	C. Howard 7244
AUDITORS	INVESTIGATION OFFICER	PERSONNEL	I. Cameron 7265	A. Ezzy 7217	Hydrologists 7248
CONFERENCE ROOM	G. BERTRAM 7314	H. HORNE 7327	Clerks Gen. 7374	Hydrographers 7218	W. Lane 7245
BOOKINGS	IRRIGATION & R.W.S.	E. Porter 7328	F. Connolly 7377	Hydrologists 7269	M. McInery 7246
A. TAYLOR 7204	S. ROSS 7220	R. FARRELL 7261	R. Dore 7372	P. Logan 7216	A. McNeil 7243
E. ROBINSON 7205	L. REDMOND 7222	Draftsmen Gen. 7379	Draftsmen Gen. 7379	L. Faroz 7216	V. McNeil (Hrs) 7248
K. Bell 7349	Draftsmen 7225	B. Fawcett 7373	Clerks Gen. 7374	K. Smythe 7388	M. Murphy 7255
F. Charters 7202	Engineers Gen. 7270	Field Staff 7377	W. Hunter 7375	SYSTEMS	K. Farry 7246
D. Connellan 7212	R. Geddes 7223	PROJECT PLANNING	W. Hutton 7378	W. BOUGHTON 7360	B. Pearce 7248
Draftsmen 7203	G. Jordan 7271	J. MORSE 7283	G. Jobling 7264	M. MARLEY 7362	I. Pullar 7249
J. McLean 7212	C. Julian 7227	T. FENWICK 7278	S. McCall 7376	Data Processing 7364	D. Schmiede 7248
B. Newburn 7211	G. Keene 7221	P. GREEVY 7285	E. Miller 7266	Programmers 7361/3	Water Quality 7242
H. Napier 7207	R. McAllister 7270	Draftsmen 7280	S. Morey 7373	FILE LINES	
D. Reid 7209	E. Melville 7224	Engineer's Gen 7282	D. Horwood 7262	L.W.S. ROCKLEA 6566	) Dial code and
I. Shield 7349	E. Beltz 7224	D. McCulloch 7280	A. Niland 7264	PORESTRY DEPT. 5766	) ask Operator for
N. Ullman 7206	S. Robinson 7226	B. McDonald 7276	I. Pryor 7260	GOVERNMENT PRINTER 5366	) Extension
C. Vandenberg 7201	LIBRARY	G. Quinn 7284	M. Purcell 7265	ANZAC SQ. BLDGS. 21	) Dial code, AWAIT DIAL
D. Wilmott 7201	J. WOODYATT (Mrs) 7337	T. Sleep 7277	M. Siebel 7377	MAIN ROADS 22	) TONE, then dial extensic
B. Wookovich 7203	LICENSES	Surveyors 7277	J. Swales 7266	POLICE H'QRS. 23	) No. OR for enquiries dis
	S.M. DEIGHTON 7380	T. Thomas 7279	F. VanSchagen 7264	Q.I.T. 24	) eg. Anzac Sq 21 9
	General 7381	P. Thompson 7285	A. Vizer 7260		
			R. Wilson 7378		

### Head Office telephone list 1974

the system or came to expect a regular afternoon off, the Department didn't lose hours as many officers simply forfeited time. But it certainly reduced 'sickies' and probably improved morale.<sup>47</sup>

The Commission gradually took over the buildings adjacent to the Courier-Mail Building, the Korbut and Palings buildings. Hydrology section was housed up a steel flight of stairs and had an unlined tin roof so it was very hot and very dirty.<sup>48</sup> The Commission also expanded into Harris Court, the adjacent building along George Street. This was refurbished and provided some improvements in accommodation, although this was not universal. The old artscope room in Harris Court was pretty small as one lad discovered when he took a back step off a ladder and *came a gutser*.<sup>49</sup>

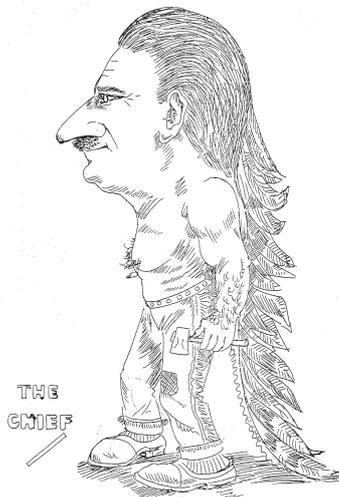
During 1979, the Cecil Hotel, on the opposite side of George Street, was demolished. This had been a favourite watering hole for Commission officers. On one of the many festive occasions there, Jim Ole climbed on to the bar and swung from one of the punkahs, only to land flat on his back on the floor. In place of the pub, a new high rise building was to be constructed and the Commission was to be housed in it.

This meant that accommodation plans had to be drawn up. There is nothing like a call for accommodation plans to bring out all the territorial instincts of those involved. If Robert Ardrey were ever to write a sequel to his *The Territorial Imperative*, he would need to look no farther than an office refurbishment project.

## WATERY SAUCES

Later that year, the building was completed and the Commission and the other tenants moved in. Mines Department was a major tenant, so the building was named Mineral House. There was naturally some resentment from Commission officers who thought that their department should be recognised equally through naming the building Mineral Water House. Ironically, Mines Department did not remain as tenants for long, moving to their much smarter Minerals and Energy Building in Mary Street, but leaving their name on 41 George Street.

Mineral House was certainly not a high quality building. In fact there was a popular rumour that it had won a prize as the shoddiest public building of the year. It did, however, have lifts (that worked most of the time) and air conditioning (that functioned similarly, though Malcolm Pegg saw the need to wear a jumper in summer and short sleeves in winter). Perhaps the worst feature of the new accommodation was (and still is) that separate floors reduce the social intercourse available to residents who, in the old accommodation, had had to pass through various areas to reach their destination.



*Harold Mortley ('The Chief').  
Drawn by Billy Kearton – Splash 1952.*

By the time the Courier-Mail Building was vacated, it had been found to be infested by West Indian termites. It was therefore wrapped in colourful plastic drapes preparatory to being fumigated. Shortly after, it and the other Commission buildings, excluding Harris Court, were demolished and replaced by the Works Department Building. This spans Margaret Street and also occupies the sites of other former buildings including the Bellevue Hotel, which was demolished during the night by the Deen Brothers under contract to the Bjelke-Petersen government.

Throughout the 1950s, '60s, '70s and most of the '80s, the Commission continued on in an ordered fashion with little change in organisation. Even when the government changed in 1956, there was some change in activities, but not in the branch arrangements. Personnel changed through retirement or resignation.

Harold Mortley retired as Chief Investigation Engineer in 1964, having been redesignated in 1954–55. Harry Harold Redvers Mortley was educated at Sydney Boys High School where he was a brilliant pupil. He graduated in Civil Engineering with first class honours from Sydney University and joined the old Irrigation Commission in 1926. He was later sent by Commissioner Partridge to Stanthorpe where he worked on the construction of Storm King Dam. Unfortunately, he suffered a serious inner ear infection, necessitating a couple of operations. His health was affected for the rest of his life.

## ORGANISATION ... AND REORGANISATION

On his return to Brisbane, he transferred to Local Government Department where, during the War, he was engaged on the investigation and design of many town water supply schemes. One of his tasks in the latter period of his employment with the Commission was to manage the scholarship-holders who had to report to him at the end of each term. Twenty years after his retirement, he could still be seen tinkering with electronic gadgets under the home he and his wife had occupied for fifty years.<sup>50</sup>

Arthur McCutchan was promoted to the position of Chief Investigation Engineer.<sup>51</sup> Following Harold Buckle's retirement in 1963, Huon McL Beal<sup>52</sup> from Main Roads was appointed as Assistant Commissioner. Arthur McCutchan was appointed to the Department of National Development in Canberra in 1966, leaving a vacancy which was filled by Walter Peak, who had recently replaced him as Senior Engineer Surface Water.<sup>53</sup>

Walter Arthur Peak joined the Commission as a cadet in 1924 and completed his engineering diploma at the Central Technical College. Until the start of World War II Walter was occupied mainly in the investigation, design and construction of urban water supplies, so he moved to Local Government Department in 1942. In 1954, he resigned to become Project Engineer of a scheme including Little Nerang Dam. He finished it within budget and sufficiently ahead of schedule to deprive himself of superannuation and long service leave benefits. He rejoined the Commission as Executive Engineer in 1963. Appointments to Senior Engineer Surface Water and Chief Investigation Engineer followed. Walter retired in 1972 but continued as a consultant for a further three years. He died in March 1992. Walter was considered by all as 'a perfect gentleman'. Joe Powell described him as *that ornament to Queensland engineering*.<sup>54</sup>



*Walter Peak*

In 1974, Bob Adamson retired and Col Taggart was appointed Secretary and Harry Hiley was made Chief Engineer to the Commissioner until his retirement in December 1971, resulting in Frank Learmonth's appointment as Assistant Commissioner.<sup>55</sup>

In 1970, in recognition of the growing importance of computer technology, a new branch, Systems, was created with Walter Boughton as Officer in Charge.<sup>56</sup>

On 15 July 1974, the unthinkable happened when 61-year-old Fred Haigh died.<sup>57</sup> No doubt a regimen of long days of work and smoking had contributed to his demise. Ironically, his clerk, 'Nobby' Clark<sup>58</sup> had always reckoned that Fred's lifestyle would kill him, but had himself predeceased Fred. For over twenty years Fred had given himself unstintingly to the State, working day and night and weekend after weekend. Fred has been described by those who knew him as an outstanding public servant, widely regarded in his profession as an irrigation expert.<sup>59</sup>



*Frank Learmonth*

Fred, like his predecessors Parkinson and Nimmo and his successor Beattie, was held in very high regard at local, national and international level. He engendered a strong team spirit, while his excellent public presentations made him a leader to be proud of. And he kept his Minister out of trouble!<sup>60</sup> Bernie Credlin is of the view that *Fred was without doubt the finest person I ever worked under.*<sup>61</sup>

Frank Learmonth was appointed for the balance of Fred Haigh's term, about three years. Frank, originally of NSW, had been recruited from the HEC Tasmania to construct Tinaroo Dam. He then became Chief Construction Engineer and presided over a major period of construction. He was always conscious of the needs and welfare of his overall workforce and had the common touch. At Tinaroo, he insisted to Dave Coles that he was 'Frank' unlike most of his contemporaries who demanded 'Mr'. He was passionate about lawn bowls. Col Taggart considers that *Frank was a very good man-manager, but was too uncomplicated to operate well in the political arena.*<sup>62</sup>

Frank Learmonth was invited to open a conference *Drill '74*. As usually occurs, departmental staff were asked to prepare a suitable address and Frank went off armed with his text but without having read it. He launched into the delivery and came, in due course, to a section dealing with less obvious sources of water supply, including towing icebergs. Frank was obviously amazed, but he ventured, "It must be right. One of my bright young engineers, Ian Pullar, wrote this." *That then caused another laugh and believe it or not the speech went down just splendidly and afterwards everyone was going around saying what a fantastic bloke that Frank Learmonth is, but what a character he was, how good he is at doing speeches.*<sup>63</sup>

Frank Learmonth's Commission was not renewed and, despite the fact that he was not yet 65, he retired in 1976. At the time it was customary for the Minister to invite retirees (along with senior staff) to his Christmas party in order to thank them for their contribution and to wish them well. Morrie Ochert recalls that in 1976 the first retiree nominated by the Minister was Frank Learmonth and this was obviously the first he had heard of his 'retirement'. *He was visibly upset and everybody at the party was very uncomfortable.*<sup>64</sup> Frank died in November 1992 at the age of 78.<sup>65</sup>

Don Beattie succeeded Frank. Donald Walter Beattie first met Tom Lang when Lang turned up to talk to undergraduates of Sydney University. Don and Bill Sharp joined the Commission together, but Lang denoted Don as the senior. Don served in the country, on construction and as District Engineer in St George and Charleville

## ORGANISATION ... AND REORGANISATION

before joining Irrigation Branch in Head Office. Through dint of dedication and diligence he rose to the rank of Chief Irrigation Engineer. Obviously marked for higher office, he was appointed Chief Engineer Special Duties and, on Fred Haigh's death, Assistant Commissioner.<sup>66</sup> He presided as Commissioner over a period of consolidation where his attributes of steadfastness and loyalty were invaluable. He was, in a sense, a transition Commissioner somewhere between the autocratic, crash-through approach of Fred Haigh and the more consultative, management-of-change approach of his successor.<sup>67</sup>

Don worked incredibly hard and for long hours both in the office and at home. He was prepared to travel extensively to present the Commission's views as well as to defend it from attack by local or industry interests. He was always available to accompany his Minister, to accept the responsibility for those things that went wrong and to pass on the credit for successes.

He was totally focused on the Commission and its objectives. He resented any intrusions that attempted to change the Commission's goals in managing the State's water resources.

Don was extremely strong-minded. When he made his mind up, it took a great deal of concentrated logic, assembled facts and plain hard work to convince him to change it. If the course he had decided upon was unpopular with staff, industry groups, customers or other departments, so be it. Popularity was not a factor in his decision-making.<sup>68</sup>

Joy Beattie was a stage director of considerable ability and Ian Pullar knew her as a thespian before he knew she was Don's wife. She was very tolerant of Don's devotion to the cause and managed sometimes to accompany him on his Australian and overseas trips. Ian once asked her if she ever got sick of visiting dams, but she replied, "Not of dams. I find dams interesting. But Don is fascinated by pump stations and I'm sick of bloody pump stations!"<sup>69</sup>

George Pearce was promoted to Assistant Commissioner along with Col Taggart.<sup>70</sup> George William Pearce joined the old Commission in 1934 as a Cadet Draftsman and commenced the Diploma Course in Civil Engineering at the Central Technical College. He later worked for the Ipswich City Council as a Draftsman before rejoining the Commission as a Field Assistant on the



*Don Beattie*



*Col Taggart*

## WATERY SAUCES



*George Pearce*

construction of Cooby Creek Dam. In 1941 George enlisted as a sapper in the Royal Australian Engineers and was promoted to Lieutenant in 1942. He saw service in New Guinea and New Britain.

'Gentleman George' returned to the Commission after the War and spent some time in Head Office on investigation surveys, construction, and surface and underground water work before being posted to Longreach as District Engineer in 1950. Much of the work involved the construction of many watering points along some of the State's most desolate stock routes. After returning to Brisbane, George took charge of the Artesian (later Underground) and Stock Water Branch. In 1971, he followed Ken Carmichael as Chief Engineer, Rivers and Streams Branch and then became Assistant Commissioner. He retired in 1978 but served as Chairman of the Border Rivers Commission from 1981 to 1986.<sup>71</sup> George was much loved by the staff, to whom he provided much encouragement and advice.

Alan Wickham, who had been Chief Designing Engineer, was appointed Chief Engineer (Special Duties) in 1977 and he succeeded George Pearce as Assistant Commissioner in 1978.<sup>72</sup> Alan joined IWSC in 1947 and served six years in design and country work before spending a year with Sir Alexander Gibb & Partners in London on hydro-electric project design. He rose to the rank of Chief Designing Engineer in 1971. In 1979 he became Deputy Commissioner of Water Resources until his retirement in 1985. Over the period 1955 to 1985 he was involved in some way with virtually every dam constructed for rural water supply purposes, a total of more than twenty. He made a speciality of geotechnical aspects and was a founding member of the Australian Geomechanics Society. He was actively involved with ANCOLD and the Institution of Engineers for many years.<sup>73</sup>

Alan took a great deal of interest in the development of young engineers and technicians, selecting cadets and scholarship holders and participating in QUT course committees over many years. He was always approachable and reliable. During Norm Butler's twilight, he carried an extra load without complaint or comment.<sup>74</sup> Entirely coincidental to his rise up the corporate ladder was



*Alan Wickham*

## ORGANISATION ... AND REORGANISATION

his marriage to the boss's daughter, Joan Nimmo. In fact, he and Joan were engaged long before her father was persuaded to become Commissioner.

The era of the IWSC was about to come to an end. The old name was seen by the Government to reflect a purely rural constituency, whereas it was desirable that the broader role of the Department should be recognised.<sup>75</sup> Accordingly, the Commission was rebadged as the Queensland Water Resources Commission. By coincidence, this occurred on Don Beattie's birthday – 12 March – in 1979.<sup>76</sup> Later, the Queensland was deleted from the title, creating WRC.

In 1979, in recognition of the increased complexity and work load of the Commission, Alan Wickham was promoted to Deputy Commissioner, and two new positions of Assistant Commissioner were created, while the positions of Chief Investigation Engineer and Chief Engineer Rivers and Streams were abolished. The incumbents of those positions, Bernie Credlin and Bill Sharp, were appointed to the Assistant Commissioner posts.<sup>77</sup>



*The Great Logo Competition...left Monika Winklers' winning design, centre, Reg O'Reilly's booby prize and right, the final design adopted for Commission use*

William Munro Sharp, like Don Beattie and John Morse, chose to leave NSW and seek his fortune in the north and joined IWSC in February 1948. He spent six to eight weeks in Head Office before being loaded on to a truck with Foreman Bill Kennedy, other construction personnel and materials, and taken to St George where a weir and bridge were to be built.

In 1953, he married Helen Wixted, Secretary to the Commissioner, and took up the post of District Engineer in Longreach, where he remained until 1960. On his return to Brisbane, he worked in Rivers and Streams before transferring to Groundwater Branch where he succeeded Bernie Credlin as Senior Engineer. He succeeded George Pearce as Chief Engineer Rivers and Streams and then, in 1979, he was appointed Assistant Commissioner, Rural Water Supplies, a position he held until retirement, aged 60, in August 1986.

## WATERY SAUCES

He supported Helen through many years of ill-health, maintaining his equanimity throughout. He was passionate about horse racing and could always tell a good story without necessarily letting facts interfere. George Pearce considers he would have made an excellent Commissioner because of his ability to see the big picture and to mix with people from all walks of life.<sup>78</sup>

Don Beattie stated at Bill Sharp's funeral in 1998, "He was a highly professional engineer with a good knowledge of his specialty areas, a very good feel for those who worked with him and a sense of humour that made working with him such a pleasure. He managed to keep meetings, including Executive Meetings, on a sane level with his ability to diffuse potentially delicate situations by relating pertinent and sometimes impertinent stories. One example of this, albeit an unintended one,



*Bill Sharp*

was when he was trying to explain a complicated issue to Commissioner Fred Haigh. The Commissioner said he couldn't understand the explanation, "It's really quite simple, Mr Haigh," Bill replied. "Even Blind Freddy could see that." Fred burst out laughing, most unexpectedly, and Bill made a vow to be more careful in future with his choice of the vernacular".<sup>79</sup>

At the end of 1980, those groups within the Department of Local Government dealing with water were incorporated into the Water Resources Commission as a Division and Jim Turnbull became an Assistant Commissioner.<sup>80</sup> This marriage of convenience was not destined to last unto death. The Local Government Association lobbied the Government vociferously and in mid-1982 the Local Government Services Division reverted to the Department of Local Government. This was a surprisingly easy move as little action had been taken to integrate the Division. It hadn't even left the Treasury Building.

It suddenly became unfashionable for titles to contain the word 'engineer' and the Divisions of Irrigation, Construction, Planning, Water Resources and Operations were headed by Directors.<sup>81</sup> Gradually the 'engineer' was dropped from other titles, too, with appellations such as Project Officer or Policy Officer being applied. Draftsmen also disappeared to be replaced by Technical Officers, although this change of title recognised the multi-skills base of these and other officers.

In 1984, the Commission lost a friend when the Minister of the day, John Goleby, was killed in a tractor accident on his farm at Redland Bay. There have been many Ministers of varying quality – including one who literally fell asleep during an open air meeting with 200 or 300 people present, leaving the Commissioner of the day and the

## ORGANISATION ... AND REORGANISATION

local Member to cope.<sup>82</sup> But John Goleby was outstanding, taking a close interest in the portfolio, more concerned with fair play than with political considerations.<sup>83</sup> Peter Bevin recalls *he was a very intelligent Minister, and probably one of the best to work with. He was always well briefed before a meeting, often taking the role of Devil's Advocate to test the various policies and practices. Once convinced, he became a very effective negotiator in meetings. He was concerned for the feelings of others. I remember a day or two before he died I was down at Parliament House and we had this chap who was going bankrupt on a farm at Bundaberg because he believed he'd bought the farm with water, and there was no water on it. He wanted a water allocation, which was impossible to give to him. John spent the best part of an hour on what was an open and shut case, trying to help this person through his difficult problems, looking over the options he had. After the meeting, we walked along the verandah out the back of Parliament and he stopped and looked out over the lawn for a while, and he said, "You know, that's the really tough part of this job, that you see those cases and you don't really have a solution. You can't help them, because if you do, you're just going to open up the floodgates. It doesn't make it any easier, though."* That was probably my last conversation with him.<sup>84</sup>

Alan Wickham retired as Deputy Commissioner in 1985 and Bernie Credlin was promoted to the position, with Tom Fenwick filling the consequential vacancy as Assistant Commissioner. Bernard Luen Credlin joined the State Rivers and Water Supply Commission as a temporary junior draftsman. After qualifying as an engineer, he worked in rural Victoria where one of the District Engineers was JD Lang, brother of Tom. Bernie was so impressed by Tom's first Annual Report that he applied for a job in Queensland. He migrated in 1949. After working in construction in the Monto, Emerald and Clare areas, he was posted to St George as District Engineer. He reluctantly moved to Brisbane to the Artesian and Stock Water Supply Branch under George Pearce in 1964. He was promoted to Senior Engineer Underground Water in 1971 and then to Chief Investigation Engineer (in charge of Surface Water, Underground Water and Planning Branches) in 1972 and Assistant Commissioner in 1978.<sup>85</sup> Bernie is a very modest man who never sought promotion for himself but was always prepared to serve the Commission loyally and diligently. A man with a devilish sense of humour, he always lived life to the full and generously gave of his knowledge and time to the future leaders of the Commission. Many stories from and about Bernie adorn the pages of this book.



*Bernie Credlin*

## WATERY SAUCES

Within months of each other Don Beattie, Bernie Credlin, Bill Sharp and Col Taggart all retired. Never before had the Commission been exposed to such a loss of experienced officers. It was, however, a clear vindication of the aphorism that no one is indispensable. As Malcolm Pegg so cogently put it, “Show me the indispensable man and I’ll sack the bastard!” Another crew was appointed to steer the *SS WRC* into the uncharted waters.

Perhaps the metaphor is not entirely apt. When Engineer Mike Wilke left the Commission for a career in private enterprise he recounted that many officers had likened him to a rat deserting a sinking ship. But he thought the Commission was far more like a barge than a ship – a barge that moved around slowly in a river without much obvious direction, with people getting on and off all the time but virtually unsinkable.<sup>86</sup>



*Col Hazel, John Cantor  
and Dave Morwood*



*Anne Epstein, Dianne Wallace, Ray  
Sutherland and Bill Meredith*

The new crew (to return to the metaphor) was Commissioner Tom Fenwick, Deputy Commissioner Peter Bevin, and Assistant Commissioners Malcolm Pegg, Pat McMahon and Bill Meredith. Bill had been appointed Secretary in 1979.<sup>87</sup> The position was not replaced; henceforth all correspondence was to be to and from the Commissioner. Would the world ever be the same again?

The pace of change was gaining momentum and the era had arrived when Tom Fenwick could say, “The only constant is change.” In 1987, the water sections of the Department of Local Government were once again transferred to the Commission and Bill Webber became a fourth Assistant Commissioner. The staff were physically transferred to Mineral House and integration was driven through amalgamation of records and financial systems and the scrambling of key staff between the new Divisions and the old.

## ORGANISATION ... AND REORGANISATION

The Public Service Board was abolished and staff were redeployed to various departments. Several key staff came to the Commission including Anne Epstein and Dianne Wallace, popularly known as ‘Princess Anne’ and ‘Lady Di’ or ‘the two princesses’.

New Divisions and Directors were created to reflect the steady progression of shifting emphasis from development to management.<sup>88</sup> The regional appointments<sup>89</sup> put into effect Tom Fenwick’s view that *the Commission needed to build a significant level of regional management with more delegated responsibility than they had had up to that time.*<sup>90</sup>



Ron Willis, Bill Eastgate, Don Gardiner  
and Bill Webber



Lee Rogers, John Ward, John Potts  
and Malcolm Pegg

There is an old story about the north bound airliner whose Captain announced, “We are now approaching Brisbane. Please put your watches back one hour and ten years.” Whilst loyal Queenslanders would strenuously and justifiably defend the local state of development, the Commission had certainly been able to observe a number of major changes in the water industry in the southern States and prepare itself accordingly to avoid making their mistakes.<sup>91</sup> To assist in this process, the Commission again engaged Gordon Jackson, a management expert who had worked with Sydney Water Board, to conduct workshops with key staff. Peter Bevin recalls that *Gordon’s view of the world was that you grabbed an organisation by the boots and picked it up and shook it. If it was able to get up again then perhaps there was a reason for its existence. He ruffled a lot of people in challenging long-held beliefs*

## WATERY SAUCES



*Bill Souter*



*Peter Gilbey*



*Tim Smith*



*Mike McKenna*

*that were founded in tradition rather than reason.*<sup>92</sup> Bill Eastgate had a similar perspective - *Gordon Jackson challenged everyone to implement change. He asked, "Why can't you do it? You've got tenure and security. What are they going to do to you? Hang you?"*<sup>93</sup> *It was really an enlightenment to see this attitude.*

A noteworthy live-in workshop was conducted at the Banyo Seminary in April 1987. The alcohol-enhanced performance of John 'The Trump' Moreton in the early hours of the morning is etched on the memories of all who attended, though it probably didn't make any of them swear off the drink.<sup>94</sup> This workshop impressed on everyone the need to look to the future and plan for the best possible outcomes. In other words, this was the start of Strategic Planning. Peter Bevin commented *at the start there were a lot of sceptics, but we tried a number of things. We tried a set of videos – the 'New-Age' thinking of Louis Theis – and we saw all this as part of the change management that we needed to work through in determining a new direction for the organisation, and maybe change the culture and the values of the organisation. All of this opening the eyes was part of the process. This work stood us in good stead and held at bay the trauma our counterparts down south went through.*<sup>95</sup>

Dianne Wallace was given the task of organising and conducting a series of Strategic Planning workshops, Branch by Branch. Peter Noonan had general oversight of the project and adjusted it as it went along. Clearly, everyone was learning, particularly in the early stages. Peter remembers *Dianne Wallace standing up the front of a Directors meeting and explaining to the Directors that she actually wanted them to think about what their goals and objectives were, and they indicated quite vociferously that that was for other people to do, that they were Directors and*

## ORGANISATION ... AND REORGANISATION



*Adrian Muller*



*Chris Robson*



*Frank van Sragen*



*John Palmer*

*shouldn't have to worry about those things! That was a fairly significant watershed, when it eventually got rammed home to them that senior management actually did need to think about the future and the directions and what the organisation was on about, rather than just ask the planner in the corner to do it. Some were really bucking at that thought.*<sup>96</sup>

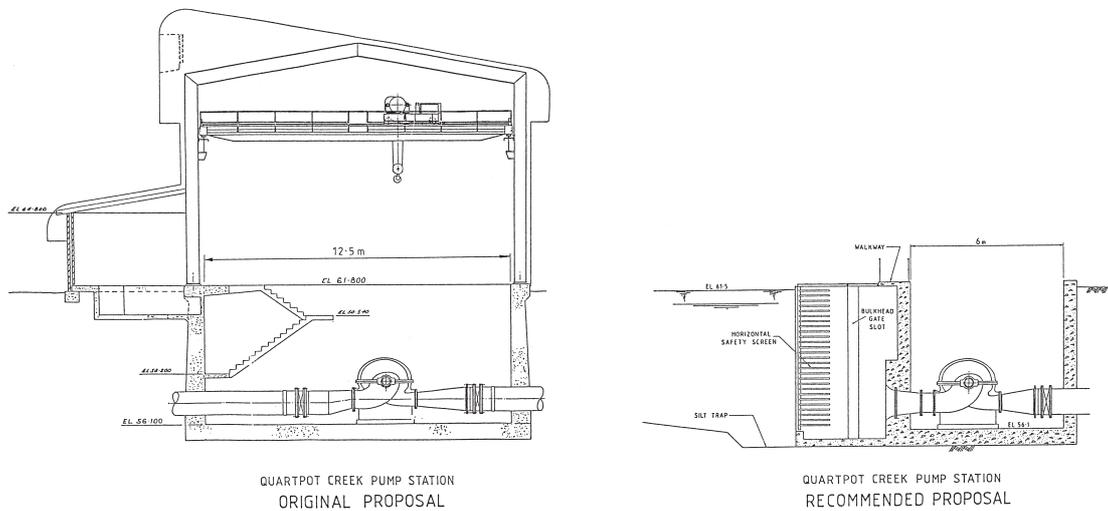
Live-in workshops were conducted, attended by a representative slice of the Branch and invited participants from other branches to provide an 'honest broker' role. A variety of venues was chosen, including the Villa Maria convent and resort accommodation at Buderim or the Sunshine Coast. The investment was prodigious, with some staff attending up to six workshops. The level of frustration was sometimes high. During the Planning Division workshop, Di Wallace was writing on butchers paper the contributions of the group, "Customers, slash, clients, slash, stakeholders" and 'Charlie' Chalmers added "Slash wrists".<sup>97</sup> Eventually, however, each Branch produced its strategic plan, complete with Vision, Mission Statement, Goals and Strategies.

Strategic Planning certainly meant that the Commission had to examine its business more closely than it had done before, at least at a general operator level. Although every year since, each Branch or Business Unit has been required to produce an updated strategic plan, the process has become more refined and no longer requires the intensive input of so many people.

The strategic plan has also been supplemented by numerous other planning and activity statements including Ministerial Program Statements and Budget Committee hearings. Perhaps all this examination results from Socrates' adage, "The unexamined life is not worth living."

## WATERY SAUCES

The activities of the Commission have, indeed, been subject to examination on a number of occasions. The Public Service Management Commission set up by the Goss Government conducted a review of all Departments.<sup>98</sup> Chris Robson had a major role in this activity. An examination was made of the economic justification for previous water resource schemes (see also Chapter 6) and a Review was conducted of the Water Production Program of the Department of Primary Industries (DPI).<sup>99</sup> Later, the Parliamentary Public Works Committee conducted investigations into Teemburra Dam, the Mareeba–Dimbulah Scheme and the St George Irrigation Area. From all of these investigations the Commission emerged with its reputation intact.



### *Quart Pot Creek Pump Station - VE Study recommendations*

**V**alue Engineering (VE) was brought to the Commission in 1987 by David Gaff, a retired power engineer from Victoria. The VE process had been invented in USA and been widely adopted there and in Japan before the Victorian State Government took it up. David had been trained on the job, had taken early retirement and come to Queensland to peddle his wares. He had achieved considerable success with the Queensland Electricity Commission before approaching QWRC. Malcolm Pegg recognised the potential of the process and became its champion.

VE is a systematic process that determines the essential functions of a design, process or procedure and develops the least cost arrangement to provide them. Throughout the world, it has been applied to save millions of dollars while still providing the essential functions, often with improved performance. The savings are usually achieved by eliminating the secondary or ‘add-on’ functions that have often ‘just grown’.

## ORGANISATION ... AND REORGANISATION

David Gaff was engaged to conduct a series of VE studies and to select and train an in-house facilitator. Recognising that pump stations are a potential area for effecting savings because of the involvement of a number of disciplines in the design, Malcolm Pegg organised the first study to be conducted on the Quart Pot Creek Pump Station then being designed in the Bundaberg Irrigation Area. The team managed to reduce the cost of the pump station from \$4.85 million to \$2.8 million.<sup>100</sup>

Malcolm and David then set out to tackle the Burdekin River Irrigation Area. The first team examined the whole project and determined those facets likely to provide savings. The next team tackled the proposed Haughton Pump Station and saved 59% of the original \$8.7 million estimate. Ian Pullar was selected as the trainee facilitator. He commenced to work with David Gaff and in due course took over. In turn, he selected other future facilitators including Paul Harding (who promptly resigned), Trevor Sleep (who was soon redeployed) and Geoff Eades (who was selected just in time to miss the last VE study).

Some two dozen VE studies were conducted with considerable success. The suite of Burdekin studies alone resulted in cost savings in excess of \$100 million as well as significant improvements in the design arrangements. The Haughton Pump Station won a number of awards for excellence, including the prestigious Institution of Engineers award. In addition, well over 100 staff were exposed to the process and have carried the principles back into their normal work life where they continue to ask questions like, "What are we really trying to achieve?", "Do we have to do that?", "How can we do it differently?"

David Gaff was re-engaged in 1991 to carry out one last study in the Burdekin. He was not well and had developed a cough which he was having difficulty shaking off. Most unfortunately, he was dying of cancer. Those who worked with him were privileged to have known him and his process.

The use of Value Engineering declined in the Commission, partly because of the unavailability of a facilitator, partly because Malcolm Pegg left the scene, partly because of the difficulty of assembling appropriate teams from among fully committed staff and partly because the gains had declined through general adoption of the principles and the fact that the projects with the biggest potential gains were targeted early. Kevin Devlin, who was involved in a number of VE studies, considers that it was a superb process which actually worked and far exceeded all other fashionable processes in making a permanent contribution to the organisation through the change in intellectual approach to problems. He believes that David Gaff would have every reason to look down at us with pride.<sup>101</sup>

In 1989, the Queensland Government decided to adopt new policies in relation to Quality Assurance.<sup>102</sup> It decided that in future all suppliers to government should have Quality Assurance systems in place and that State Government departments should also obtain certification where this was appropriate. Clearly, engineering services was a candidate for certification and Malcolm Pegg was given the task of implementing quality procedures. He commenced by engaging consultants BywaterCamac to conduct a workshop in August 1989.

The principle of Total Quality Management (TQM) – the system adopted within the Commission – is to identify activities, to describe procedures by which they should be conducted, determine the monitoring requirements and incorporate reviews and quality improvement measures. The idea is to do it right every time and avoid expensive reworks.<sup>103</sup> Quality Assurance is a component of TQM.

Although it was recognised that quality management could lead to improvement, it was introduced because of the governmental edict. For that reason, as well as the fact that it was embryonic and hence ill-defined, implementation was slow. Initially, Max Schulz was given a major role in developing procedures for departmental processes. However, Max left to join the private sector. In recognition of the very large effort required, management organised several training sessions from experts including John Clarke from BHP Engineering and Dr John Fenwick (Tom's brother) from the Department of Main Roads.<sup>104</sup>

Each of the Branches within the development area was required to draft procedures. Managers reported varying degrees of success as this had to be fitted in among other priorities and resources could not be made available to the extent required to expedite the task. However, Paul Johnson played a very active role and wrote the initial Quality Manual for Construction virtually single handed.<sup>105</sup>

The allocation of a major slice of Richard Cowley's time to the task enabled substantial progress to be made. Procedures were eventually written, reviewed and approved, with substantial progress having been made by 1995. Engineering Services achieved certification in July 1998. Improvements have continued to be made since that date. The materials laboratory has, of course, been quality assured for a considerable time,<sup>106</sup> but arguably, its procedures are easier to codify.

At the end of 1989, the National Party Government went to the polls in the wake of corruption scandals and the Fitzgerald Inquiry. The Government was hopeful that it would be returned, though probably having to go back into coalition with the Liberal Party. Not all members of the Government were confident of success. Just before the election, Peter Bevin as Acting Commissioner had taken the Minister, Don Neal, on a trip to Bundaberg and it had become increasingly clear that the mood was

## ORGANISATION ... AND REORGANISATION

ripe for a change of government. No doubt aware of changes that had been introduced down south, Don Neal told Peter, “I fear for the future of the Commission as an organisation and for its people.”<sup>107</sup>

In the event, Wayne Goss led the first Labor Government in 33 years to power. In opposition, the ALP had promised that Water Resources would be amalgamated with the Department of Primary Industries. The new Government was true to its word although the new Minister, Ed Casey, announced that there was nothing to fear, as employees would barely notice the difference.<sup>108</sup> The Water Resources Commission became a Business Group of DPI and there were no organisational changes for the 1,035 staff now employed.<sup>109</sup> The following year, Peter Bevin was sent ‘up the road’ to a corporate co-ordinating role and Dave Morwood became Acting Deputy Commissioner.<sup>110</sup>

David Langley Morwood attended the University of Queensland as a scholarship-holder and graduated in Civil Engineering in 1953, and in Economics in 1963. His career with IWSC commenced in Construction Branch in the Burdekin Irrigation Area at Millaroo and Dalbeg. He moved to Head Office, Irrigation Branch, in 1957, and to Farm Water Supplies in Rivers and Streams Branch in 1958. He played a leading role in Farm Water Supply design development (see Chapter 11).

He moved to Irrigation Area Design in 1983, and to Director, Operations Division, in 1986. He helped with important changes in management, decentralisation, multi skilling of technical staff and revenue creation. During his career, he also served as Technical Secretary of the Australian National Committee on Irrigation and Drainage (ANCID) and was a member of the AWRC Committees on *Hydrology of Small Rural Catchments* and *Financial Management*. He retired in 1991 and later served for five years as Chairman of the Border Rivers Commission.



*Dave Morwood*

In his youth, Dave was slightly unconventional, believing in freedom of the individual. So he refused to wear a tie until Reg Fox pointed out to him that if supervisory staff were looking to see if he had a tie on, they would notice any minor misdemeanours. He took to wearing ties. At a management workshop in 1989, Dave played ‘hardball’ at a prisoner’s dilemma exercise, much to the amazement of Anne Epstein, who had always thought he was a nice guy. But as Dave points out, he has always played hard – at sailing and other sports – until the contest is over and, hopefully, won.<sup>111</sup> He then reverts to the good guy role for which he is so well known and admired.

## WATERY SAUCES

In 1991, it was decided that there were too many divisions and they were drastically reduced.<sup>112</sup> Around this time, quotations began to appear on notice boards indicating that staff thought all the change was unnecessary.

**"We trained hard, but it seemed every time we were beginning to form teams, we would be reorganised. I was to learn later in life that we tend to meet every situation by reorganising, and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency and demoralisation." — Petronius Arbiter.**

### **THE FLOGGINGS WILL CONTINUE UNTIL MORALE IMPROVES.**

**We're implementing an employee incentive scheme – fear of the sack.**

A conundrum of that time was "What's the difference between the Commission and a circus?" There were two answers – "the circus has a programme" and "the Commission has more clowns".



*Tom Fenwick*

In 1991 Tom Fenwick was appointed Deputy Director-General of the Department of Primary Industries (DPI) and left the Water Resources Commission. Thomas David Fenwick, a scholarship-holder, graduated with first class honours from the University of Queensland and served some years in Head Office before gaining construction experience at Wuruma and Maroon dams. He then chose to join the private sector where he worked as a consultant until Frank Learmonth persuaded him to return to the Commission. He joined Planning and set up Forward Planning Branch where he undertook much of the early planning for the Burdekin Scheme. Tom had always been universally recognised as a future leader, and he was given a post of Special Projects before briefly serving as Assistant Commissioner and then succeeding Don Beattie in 1986. Incorporation of the Commission into DPI in late 1989 opened further opportunities for him and he became, in turn, Deputy Director-General and then Director-General. At (Health Minister) Peter Beattie's request, he acted as Director-General of Health for a brief period to set up a new regional structure. With the formation of Department of Natural Resources (DNR) in 1996, Tom became Director-General until his retirement in 1999. He was the Institution of Engineers' Engineer of the Year in 1998.

Tom was a big man (literally and figuratively) of enormous vision who survived three changes of government and coped with the complexities of continual change. According to Peter Bevin, *Bill (Sharp) made a prediction that Fred would be outdone by Tom as a Commissioner, that Tom would be the best. At the time I thought Fred's*

## ORGANISATION ... AND REORGANISATION

*would be a difficult act to follow. It's difficult to compare them across different times and issues, but I think Tom certainly was equal, if not better – and that's a big statement!* But even great men have weaknesses – Tom was an indifferent bridge player!

Peter Bevin became the Executive Director (Water Resources) and thus Commissioner – the last. Peter John Charles Bevin completed his engineering as a scholarship-holder and joined IWSC in 1961. After a year in Rivers and Streams, he joined Construction and served in Mareeba, on Borumba and Wuruma dams and for the Water Boards in Ayr and Home Hill. He became District Engineer in Bundaberg. Three years in Emerald as DE designing irrigation layouts prepared him for a return to Bundaberg and the irrigation area design. In 1980, he took the plunge and moved to Head Office to establish the Irrigation Area Design group. In 1983, he succeeded Len Redmond in Operations. He became Deputy Commissioner to Tom Fenwick in 1987 until the DPI amalgamation when he undertook a co-ordinating role for the new and enlarged Department. On Tom's elevation, Peter returned to the Commission as Executive Director and Commissioner until the reorganisation that abolished the Commission. He later moved to Deputy Director-General of DNR before his retirement in 1998.



*Peter Bevin*

All the irrigation engineers who were trained by Peter speak highly of his ability to cut to the quick of a problem and to encourage and value subordinate officers. The clients of areas such as Emerald and Bundaberg speak of him with affection and admiration. He was an excellent chairman of meetings where he would ask participants for their views without telegraphing his own. At the end, if there was consensus, he would sum up succinctly and ask for endorsement. If there was no consensus, he would lay down his decision. As Peter describes himself, *I've never been a crash-through person, really. I came from the planning side of things. Maybe it looks slow and people see you as making excuses, but you lose a lot otherwise in wasted time, in morale, and it takes you a long time to get back, if you crash through.*<sup>113</sup>

Peter Bevin's deputy was Malcolm Pegg. Malcolm Miles Pegg attended the University of Queensland as a scholarship-holder, graduating in 1956. He spent some time in Regional work, setting up the office in Rockhampton. He chose to specialise in construction, working on Wuruma Dam, the Mareeba–Dimbulah scheme, Bedford Weir and Fairbairn Dam before becoming Project Engineer on Glenlyon and Wivenhoe dams. In 1978, at the tender age of 42, he succeeded Alan Taylor as Chief Construction Engineer. He was promoted to Assistant Commissioner in 1986 and became Director

## WATERY SAUCES

of Development Division and Deputy Commissioner in 1991. In that capacity he presided over a major downsizing of the Commission, a job he did not relish. Once the task was completed, he moved into the Department proper to manage land assets until his own early retirement in 1993.



*Malcolm Pegg*

Malcolm was highly intelligent and incisive and could cut to the nub of a situation very quickly. As a result, he did not need a lot of advice and was not strongly endowed with social graces or the gift of the blarney. He could often be found with his feet on his desk, scratching himself while contemplating a problem. He was also very good at recognising talents in others and his selection of complementary teams for Value Engineering studies and the like was inspired.

He claimed that his long-term bachelorhood was mostly due to his devotion to the Commission causing a nomadic life. It was extremely gratifying to see him take a wife, Beth, after his retirement and to take up such a relaxing hobby as birdwatching.

The change of government in 1989 brought a change in priorities to the State and water resource development moved towards the bottom of the list. The development budget was slashed.<sup>114</sup> In order to cope, the Commission obviously needed to ‘downsize’, to use the jargon of the day. Accordingly, staff were offered Voluntary Early Retirements (VERs) with payments over and above their normal severance entitlements of two weeks pay for each year’s service (to a maximum of 52 weeks) plus an added bonus for a rapid departure. Although the aim was to reduce staff in the Development area, it was offered throughout the Commission as transfers could be used to adjust staffing levels.<sup>115</sup>

A significant number of staff elected to take the offer. A lot who went were the ones who could get jobs relatively easily. When the loss of so many good staff was bemoaned to Malcolm Pegg, he responded, “Yes, but think of the dross we’re also losing.” A number of officers saw it as an opportunity to pursue a path they’d hankered after, while others saw it as an opportunity to get out of holes into which their square pegs didn’t fit comfortably. In Malcolm’s view, *the loss of good staff was not altogether a bad thing, as too many good men can get in each other’s way. You can’t have two roosters on a muck heap!*<sup>116</sup>

The Department adjusted to the change. In due course, a number of the early retirees returned, in some cases being re-engaged as permanent members of staff and in others as contractors. Some officers have questioned the wisdom of rehiring

## ORGANISATION ... AND REORGANISATION

older transients instead of recruiting at a lower level and hence providing for the future. It has, however, been difficult to recruit younger professional staff, particularly in the Regions. Even when jobs are advertised at a reasonable level and in a period of relatively high unemployment, the applicant pool of suitably qualified people is remarkably small.<sup>117</sup>

The astute reader of this chronicle will probably have observed that, generally speaking, vacancies were filled by the next most senior man. Sir Humphrey Appleby, in the television series *Yes Minister*, described the promotional policy of the British Civil Service as “The best man for the job as long as it’s his turn.” Bill Souter hadn’t realised it was his turn and so neglected to apply for the vacancy in Mackay in 1980. Harry Stark pointed out his error to him.<sup>118</sup> In fact, the Commission’s promotional policy was always based on merit with seniority only becoming relevant if all other considerations were equal. It is probably testimony to the Commission’s succession planning if appointments only infrequently caused surprise. Don Beattie considers that all those promoted to senior ranks during his career were *excellent blokes*, appointed on merit. It was, however, an observable fact that appointments from outside were very rare.

There was an expectation that jobs would be filled by the senior applicant. There were in existence lists showing the seniority of Engineers, Draftsmen and Clerks so employees knew who was the most likely to be promoted to a vacancy (usually some relevant experience was considered along with seniority) and when they, in turn, could expect to be promoted. As Barry Mewburn described it, *in 1984, I’d worked out that in 2014, when I was 65 and taking the six months extension, I’d be able to compete with my exact contemporaries for the Class 4 position – the only one there was.*

2 ADMINISTRATIVE STAFF CLASSIFIED OFFICERS			
CLASS.	NAME	APPOINTED TO CLASSIFICATION	POSITION
I-2	FOSSETT, W.G.	20.12.73	CLERK (LICENSING) MAREEBA
(21)	ROBINSON, E.J.	7. 2.74	CLERK (PROPERTY)
	WILLIAMS, M.T.	7. 2.74	DISTRICT CLERK DIVISION III ROCKHAMPTON
	MCCARTHY, P.B.	7.11.74	CLERK (LICENSING) BUNDABERG
	BACKHOUSE, P.I.	20. 2.75	CLERK RELIEVING
	CURTIN, J.J.	15. 5.75	SECRETARY TO THE WATER QUALITY COUNCIL
	ELMS, S.J.	26. 6.75	WORKS CLERK GRADE I
	MEWBURN, B.J.	17. 7.75	CLERK (CONSTRUCTION)
	MCGINTOSH, D.A.R.	8. 7.76	WORKS CLERK GRADE I
	BURGESS, T.M.	20. 1.77	CLERK (PROPERTY)
	CRAIG, R.J.	1. 9.77	CLERK (GROUNDWATER)
	BARNETT, D.J.	1. 9.77	CLERK (STORES AND SUPPLY)
	GIENITO, A.	13.10.77	CLERK (EXPENDITURE)
	FARRELL, R.C.	21. 9.78	CLERK (PROPERTY)
	PARRY, K.	19.10.78	CLERK (IRRIGATION)
	BUGEJA, A.P.	4.10.79	CLERK (STREAM CONTROL)
	O'BRIEN, L.D.	22.11.79	DISTRICT CLERK DIVISION III ST GEORGE
	KENNEDY, K.J.	13.12.79	WORKS CLERK GRADE I
	JOHNSON, J.F.	10. 1.80	WORKS CLERK GRADE I
	O'DONOHUE, J.M.	16.10.80	WORKS CLERK GRADE I
	DONOVAN C.D.	13.11.80	DISTRICT CLERK DIVISION III TOWNSVILLE
I-1	NEUBECKER, N.J.	18.6.70	WORKS CLERK GRADE II
(45)	KRAUT, H.R.	6. 5.71	WORKS CLERK GRADE II
	OSBALDESTON, J.E.	2. 9.71	DISTRICT CLERK DIVISION IV TOOWOOMBA
	LISTER, M.R.	7. 9.72	STOREKEEPER ROCKLEA
	BENNETT, P.R.	19. 4.73	CLERK (LAND ACQUISITIONS)
	THOMPSON, P.E.	4.10.73	CLERK (FARM WATER SUPPLIES)
	ARCHIE, K.J.	24. 4.74	CLERK (OPERATIONS)
	RATAJCZAK, J.	24. 4.74	CLERK (RECEIVING)
	KRNJACKI, D.	7.11.74	CLERK (PURCHASING)
	O'SHEA, T.J.	20. 2.75	CLERK (SEARCHES)
	PAROZ, L.M.	20. 2.75	CLERK (RELIEVING)
	BLAIK, G.R.	10. 4.75	CLERK (CASH CREDITS)
	MOORE, R.E.	15. 5.75	CLERK (WORKS)
	CRUTCHER, J.W.	26. 6.75	CLERK (MECHANICAL AND ELECTRICAL)
	BLAKE, K.J.	17. 7.75	CLERK (SALARIES AND WAGES)
	MARSHALL, R.C.	17. 7.75	CLERK (COSTING)
	WOODROW, N.S.	27. 5.76	CLERK (WATER QUALITY SEARCH)
	KULPA, I.P.	8. 7.76	DISTRICT CLERK DIVISION IV WARWICK
	IRVINE, R.K. (MISS)	20. 1.77	DISTRICT CLERK DIVISION IV MACKAY
	ROGERS, R.J.	11. 8.77	CLERK (WORKS)
	HANSEN, G.C.	1. 9.77	CLERK SURFACE WATER
	ROWAN, C.J.	1. 9.77	CLERK (RELIEVING)
	DUNN, B.J.	1. 9.77	CLERK (VOUCHERS)
	HOGAN, N.V.	20.10.77	CLERK (WORKS)
	SCHULTZ, D.N.	8.12.77	CLERK (WORKS)
	AUSTIN, D.R.	27. 4.78	CLERK (PROJECT PLANNING)
	THOMAS, I.B.	27.4.78	DISTRICT CLERK DIVISION IV EMERALD
	STEWART, W.D.	24. 5.78	CLERK (LAND USE) BUNDABERG
	SURMON, R.A.	21. 9.78	CLERK (RIVER IMPROVEMENT)

*Seniority list of 1981*

## WATERY SAUCES

Under these circumstances, job applications could be mercifully brief. One submitted by Len Redmond for a promotion to Executive Engineer was all of two pages long, and merely outlined his experience.<sup>119</sup> More recent applications, which have to address up to six selection criteria, frequently run to 20 pages or more. But this, of course, is what is required under the modern requirements for appointment on merit which some wags dubbed as MERIT – Mates Elevated Regardless of Intellect or Training. The contemporary selection panel is certainly faced with a much more onerous task and the time taken to fill a position (from drafting the Position Description, having it evaluated for classification, advertising, shortlisting, interviewing, moderating scores, writing the selection report and gaining approval – only to find that the successful applicant has given up and taken a job elsewhere) averages five months. Yet in 1995, Jim Varghese (then Executive Director, Corporate Services in DPI) claimed that the new selection processes were vastly improved because more women were being appointed!<sup>120</sup>

Until the late 1980s, many appointments (at level) were made on the basis of someone being selected and someone having a quiet word to him. Alan Wickham was asked would he like to be District Engineer at Goondiwindi and could he start there in two weeks time.<sup>121</sup> Stan Ross went to Bundaberg to try to find someone to go to Mackay. He assembled the office staff just after morning tea to ask for volunteers. Ross Krebs was willing but didn't think he'd be able to leave before 2 p.m.<sup>122</sup>

It would be far more difficult to operate in this fashion today. Apart from anything else, wives (and sometimes husbands) have their own careers to pursue and are less inclined to pack up the family, sell the house and tidy up the household affairs while intrepid spouse heads off for the wilds as people such as Eileen Rossi did in the past.

Promotions were often more difficult to achieve and subject to appeal sufficiently often to ensure that they were taken very seriously by the selection panels. On one occasion both Bevan Faulkner and Bill Eastgate were applicants for a position, and Bill was appointed. Bevan gave the matter a great deal of thought. *I weighed up my experience against Eastgate's and I decided that where I had strengths he had weaknesses and where I had weaknesses he had strengths, so I scored us about 50/50. So I didn't really think I could appeal. Shortly after I said to (Bernie) Credlin, "What's Eastgate got that I haven't got?" And he said, "The job."*<sup>123</sup>

Generally, the Commission was benevolent towards its employees, particularly those who were deemed to have done the right thing. Even though public servants sign on to serve 'anywhere in the State', officers were seldom sent to places where they would prefer not to serve and transfers were usually arranged for those who wanted them (though not always as rapidly!)

## ORGANISATION ... AND REORGANISATION

When Jim Ole was severely injured, the Commission arranged for him to return to work on a reduced load as part of his (largely unsuccessful) rehabilitation. When Dennis 'Blue' Reid was dying of cancer but preferred to come to work than to stay at home, he was allowed to come and sit at his desk wearing a beanie and other warm clothing.

In the early 1990s, the Public Service Board required Departments to introduce a staff appraisal system. This was not universally liked, or uniformly implemented. Malcolm Pegg saw no need for it – “if you’d mucked anything up, I’d have told you,” was his view on the matter. In 1990, Senior Staff were expected to sign up for their Significant Intended Achievements (SIAs) for the year and there was even talk of performance pay. Warren Lane spent the entire year working on the water supply strategy for south-east Queensland and, despite working excessively hard, failed to achieve even one of his SIAs because this project had not existed when he reached agreement with his Manager. Perhaps he should have been docked pay!

In 1988, the National Party Government decided to employ the more senior staff under contract. Despite some reluctance on the part of some officers and the Unions, officers signed up. The Labor Government decided to revert to tenured positions (except for the most senior officers) and, despite some reluctance, in 1993 everyone agreed.

During 1989, a review of all Technical Officer positions was carried out, with virtually everyone interviewed believing his job was more complex and demanding than the next man’s. A new pay scale was introduced, abolishing the old Part I, Part II arrangements. Employees were now classified as AOs (Administrative Officers), POs (Professional Officers) or TOs (Technical Officers) and the old classifications were translated – for example, I-13 to PO4 or AO6. The concept of banding was also introduced. A new ‘objective’ system of determining classifications for jobs was introduced called CED (from its perpetrators Cullen, Egan and Dell), and not ‘Common Effluent Drain’ as coined by the Local Authority boys.<sup>124</sup>

In 1993, the technical Divisions were further reduced to Water Resources, Client Advisory Services and Water Production with Lee Rogers, Bill Eastgate and John Potts as Directors.<sup>125</sup> Further changes were in the wind. Despite the expectations that the amalgamating departments would essentially retain their character, pressure was building up to achieve a greater degree of integration.

Peter Bevin had not been aware in 1991 of the strength of the integration push – after all his role was one of co-ordination. *If it had been integration, I would have been on a different path, but I was given the job and title of co-ordination. But that seemed to be going too slowly, because we crashed through at the end of the day*

## WATERY SAUCES



*The seven post-war Commissioners, left to right, Fred Haigh, Tom Lang, Frank Learmonth, Peter Bevin, Bill Nimmo, Don Beattie and Tom Fenwick. Painting by Brett Lethbridge, presented to Peter Bevin on his retirement in 1998.*

*and amalgamated with DPI in the areas of commonality such as finance and administration.*<sup>126</sup> By 1995, the Minister, Ed Casey, was driving the integration agenda even harder and fundamental changes were made to break down the silos from the old departments and to amalgamate the various components of the DPI. The Water Resources Commission was abolished and the staff were dispersed through new Business Groups, variously titled Water Commercial, Rural and Regional Development, Resource Management and Resource Sciences Centre, all of which also included officers of the old DPI and Forestry departments. There was no longer an identifiable Water Resources entity and history, as portrayed by Sellar and Yeatman, came to a .<sup>127</sup>